SONY

FLAT WIDE DISPLAY

FWD-50PX1
FWD-50PX1N

FLAT PANEL DISPLAY SPEAKER SYSTEM
SS-SP50FW

TV STAND
SU-50FW

SERVICE MANUAL
1st Edition

⚠警告

このマニュアルは，サービス専用です。
お客様が，このマニュアルに記載された設置や保守，点検，修理などを行うと感電や火災，人身事故につながることがあります。
危険をさけるため，サービストレーニングを受けた技術者のみご使用ください。

⚠WARNING

This manual is intended for qualified service personnel only.
To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

⚠WARNUNG

Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.
Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegeben Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

⚠AVERTISSEMENT

Ce manual est destiné uniquement aux personnes compétentes en charge de l’entretien. Afin de réduire les risques de décharge électrique, d’incendie ou de blessure n’effectuer que les réparations indiquées dans le mode d’emploi à moins d’être qualifié pour en effectuer d’autres. Pour toute réparation faire appel à une personne compétente uniquement.

Power cord plug should be pulled out from the wall before starting the service operation.
If power switch is turned OFF only, you may receive an electric shock, because the unit may have an electric inside.
Therefore, you should pull out the power cord plug from the wall before starting the service operation.

注意

指定以外の電池に交換すると，破裂する危険があります。
使用済の電池は，説明書に従って処理してください。

CAUTION

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the manufacturer.
Dispose of used batteries according to the manufacturer's instructions.

Vorsicht!

Explosionsgefahr bei unsachgemäßem Austausch der Batterie.

Ersatz nur durch denselben oder einen vom Hersteller empfohlenen ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

ATTENTION

Il y a danger d'explosion s'il y a remplacement incorrect de la batterie.

Remplacer uniquement avec une batterie du même type ou d'un type équivalent recommandé par le constructeur.
Mettre au rebut les batteries usagées conformément aux instructions du fabricant.

ADVARSEL!

Lithiumbatteri-Eksplosionsfare ved fejlagtig håndtering.
Udskiftning må kun ske med batteri af samme fabrikat og type.
Levér det brugte batteri tilbage til leverandøren.

ADVARSEL

Lithiumbatteri - Eksplosjonsfare.
Ved utskifting benyttes kun batteri som anbefalt av apparatfabrikanten.
Brukt batteri returneres apparatleverandøren.

VARNING

Explosionsfara vid felaktigt batteribyte.
Använd samma batterityp eller en likvärdig typ som rekommenderas av apparattillverkaren.
Kassera använt batteri enligt gällande föreskrifter.

VAROITUS

Paristo voi räjähtää jos se on virheellisesti asennettu.
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin.
Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

For the customers in the Netherlands
Voor de klanten in Nederland

Hoe u de batterijen moet verwijderen, leest u in de tekst van deze handleiding.

Gooi de batterij niet weg maar lever deze in als klein chemisch afval (KCA).

Für Kunden in Deutschland

Entsorgungshinweis: Bitte werfen Sie nur entladene Batterien in die Sammelboxen beim Handel oder den Kommunen. Entladen sind Batterien in der Regel dann, wenn das Gerät abschaltet und signalisiert “Batterie leer” oder nach längerer Gebrauchsdauer der Batterien “nicht mehr einwandfrei funktioniert”. Um sicherzugehen, kleben Sie die Batteriepole z.B. mit einem Klebestreifen ab oder geben Sie die Batterien einzeln in einen Plastikbeutel.

For the customers in the U.S.A. and Canada

RECYCLING LITHIUM-ION BATTERIES

Lithium-Ion batteries are recyclable.
You can help preserve our environment by returning your used rechargeable batteries to the collection and recycling location nearest you.

For more information regarding recycling of rechargeable batteries, call toll free 1-800-822-8837, or visit http://www.rbrc.org/

Caution: Do not handle damaged or leaking Lithium-Ion batteries.

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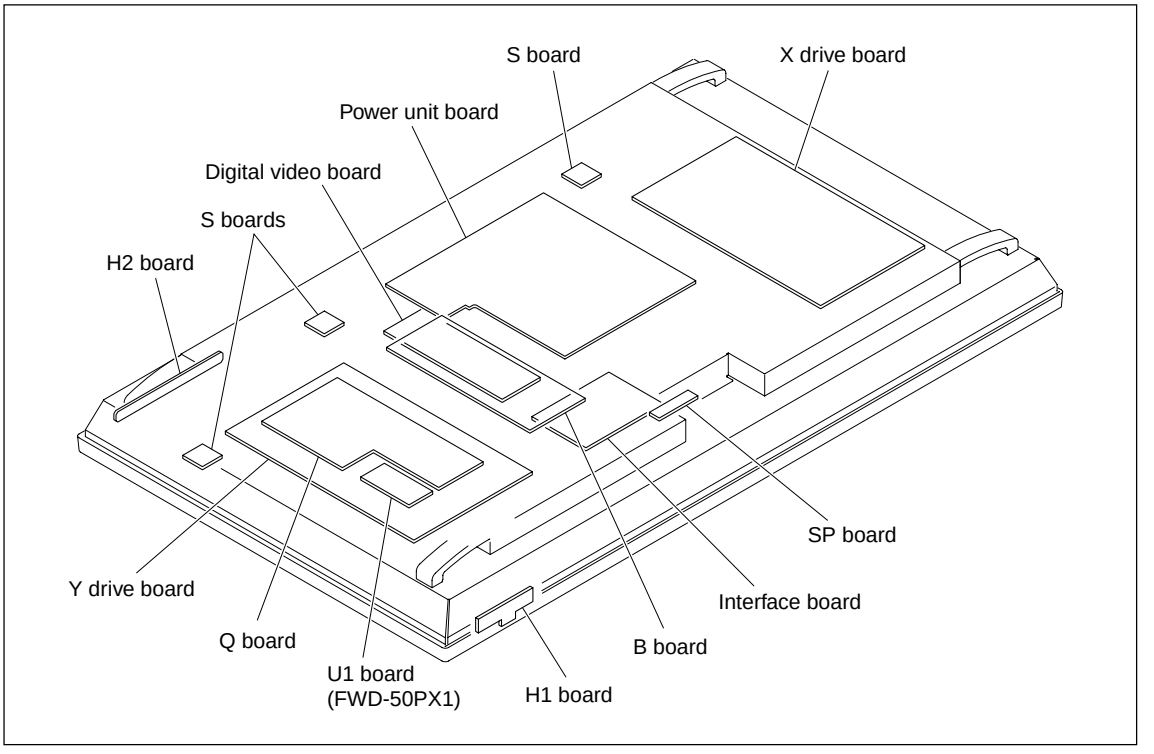
Section 1
Service Overview

1-1. Board Location



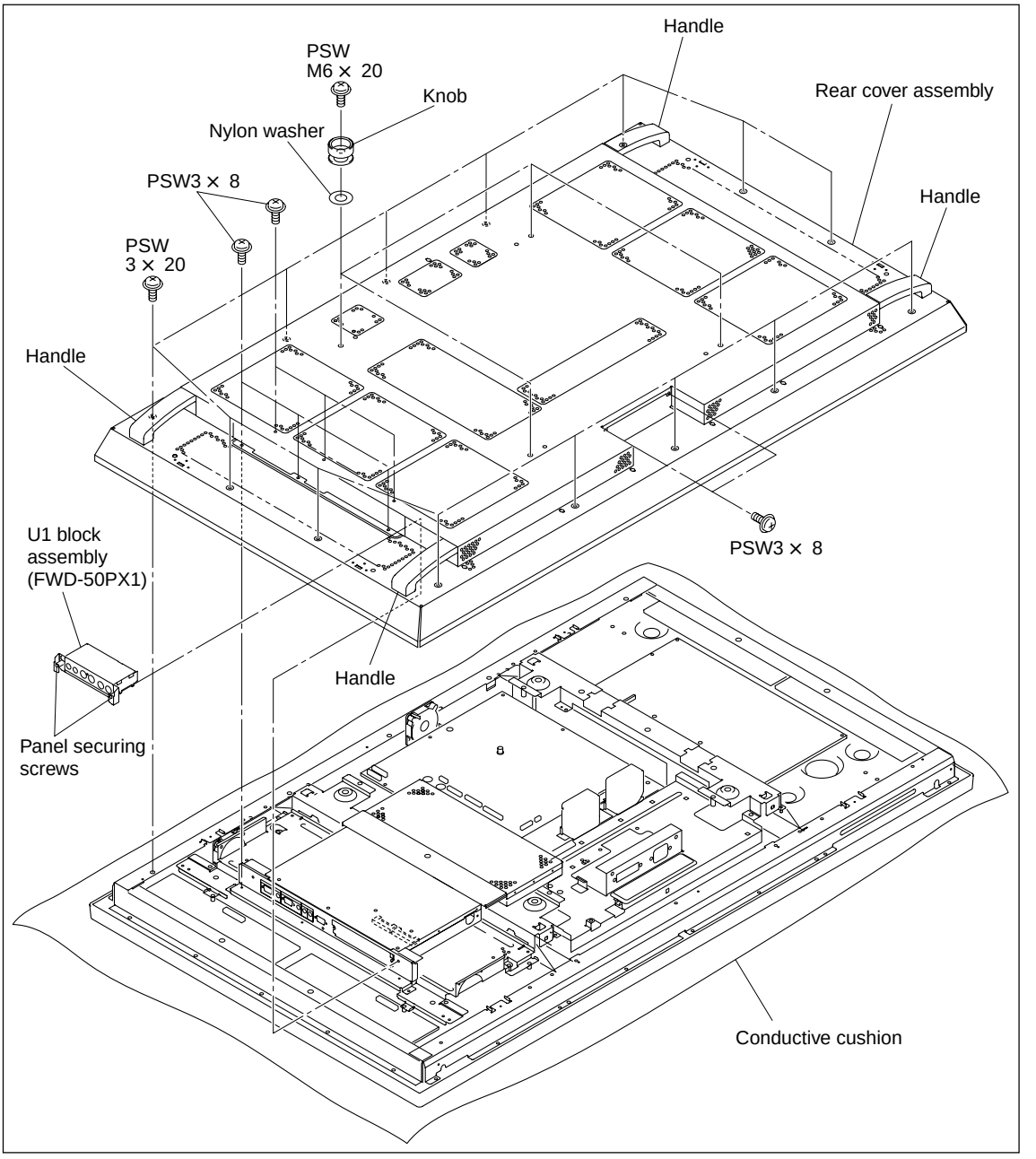
1-2. Installing/Removing the Cabinet

Note

When installing/removing the cabinet and replacing the board, place the unit on the conductive cushion.

1-2-1. Rear Cover Assembly

1. Loosen the two panel securing screws, then remove the U1 block assembly. (FWD-50PX1 only)
2. Remove the four screws (PSW M6 × 20), then remove the four nylon washers and four knobs.
3. Remove the fourteen screws (PSW3 × 20) and eight screws (PSW3 × 8), then remove the rear cover assembly while holding the handle.



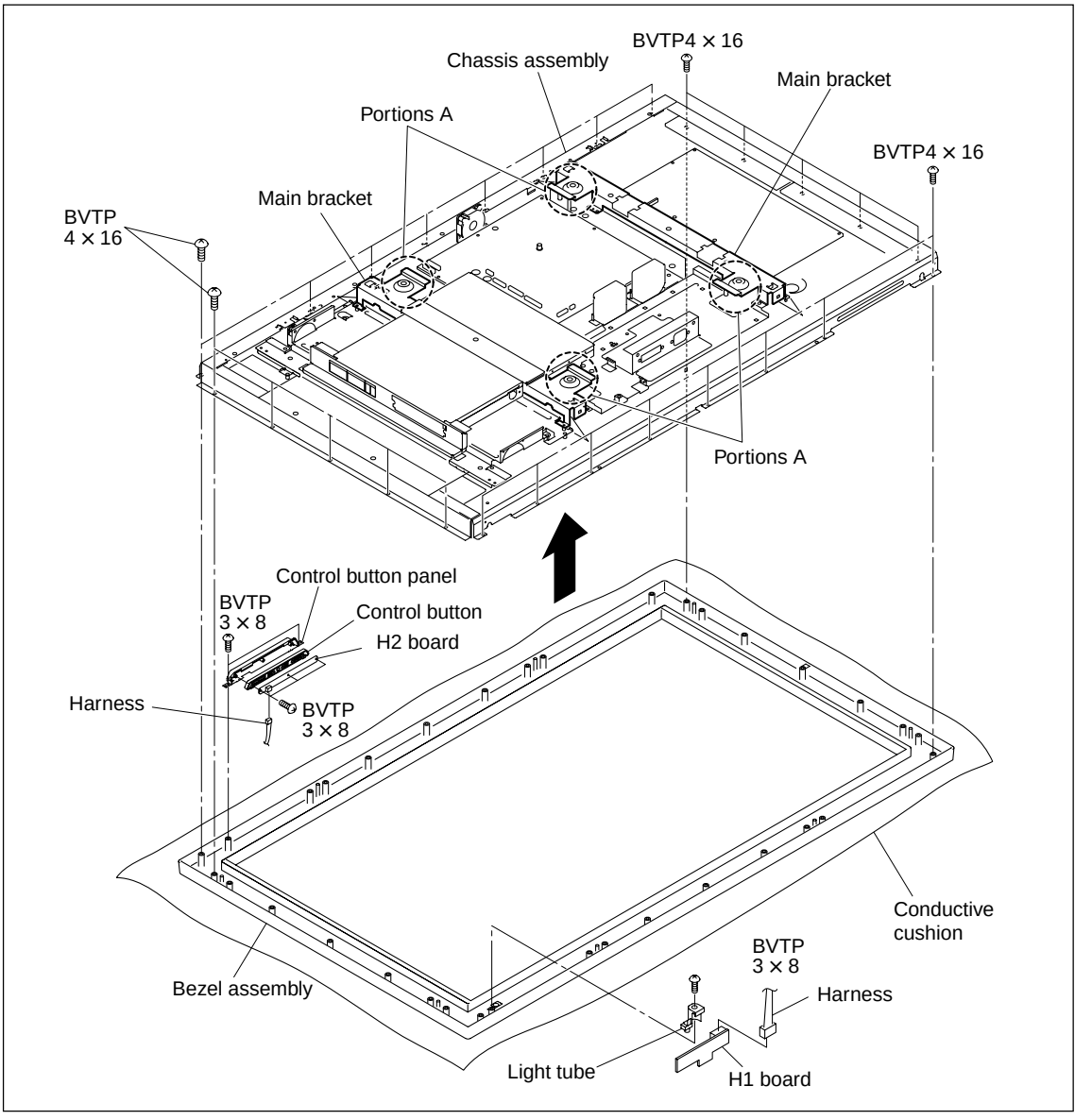
4. Attach the rear cover assembly in the reverse order of steps 1 to 3.

1-2-2. Bezel Assembly

Notes

- Be sure to remove the chassis assembly with more than two persons.
- Place the removed chassis assembly on the conductive cushion.

1. Remove the rear cover assembly. (Refer to Section 1-2-1.)
2. Remove the two screws (BVTP3 × 8), then remove the control button panel.
3. Disconnect the harness from the connector on the H2 board.
4. Remove the three screws (BVTP3 × 8), then remove the control button and H2 board.
5. Remove the screw (BVTP3 × 8), then remove the light tube and H1 board.
6. Disconnect the harness from the connector on the H1 board.
7. Remove the twenty-six screws (BVTP4 × 16).
8. Remove the chassis assembly while holding the portions A of the main bracket.

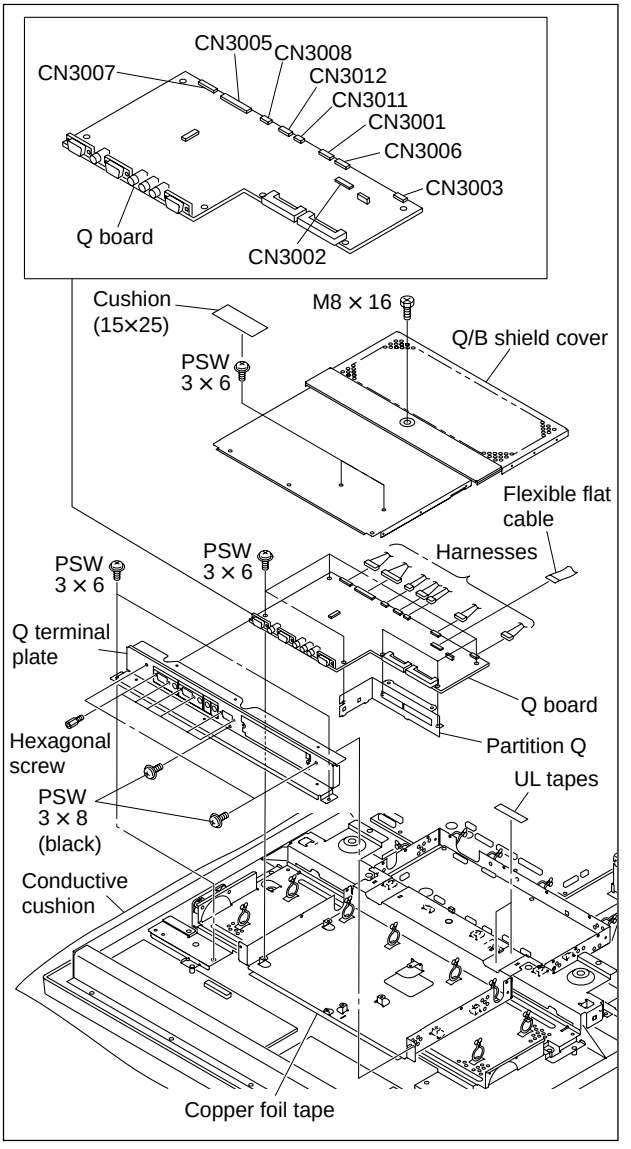


9. Attach the bezel assembly in the reverse order of steps 1 to 8.

1-3. Replacing the Board

1-3-1. Q Board

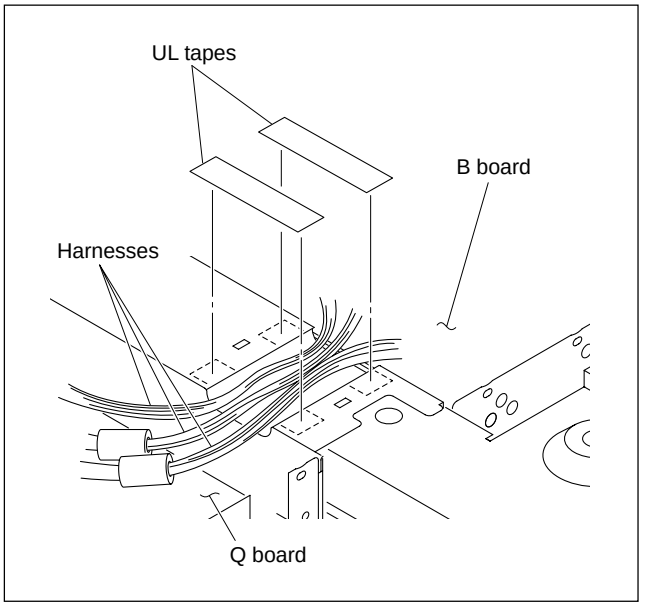
1. Remove the rear cover assembly.
   (Refer to Section 1-2-1.)
2. Remove the bolt, cushion (15×25), and two screws (PSW3 × 8), then remove the Q/B shield cover.
3. Remove the two screws (PSW3 × 6), three screws (PSW3 × 8) (black) and six hexagonal screws, then remove the Q terminal plate.
4. Move the Q terminal plate slowly in the direction shown by the arrow, then remove it from the copper foil tape.
5. Remove the two UL tapes, then disconnect the seven harnesses and the flexible flat cable connected to the Q board.
6. Remove the six screws, then remove the Q board and partition Q.



7. Install the Q board in the reverse order of steps 1 to 6.

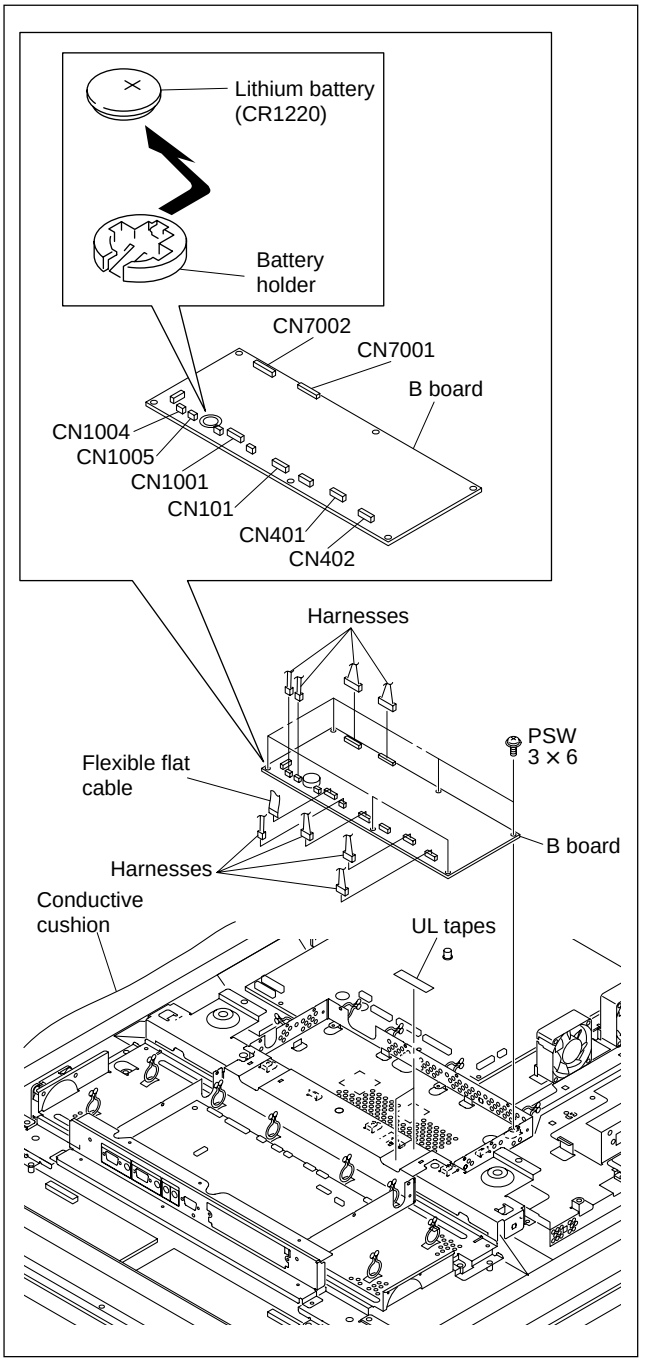
Note

Place and fix the harnesses to connect the Q board and B board as shown in the illustration.



1-3-2. B Board

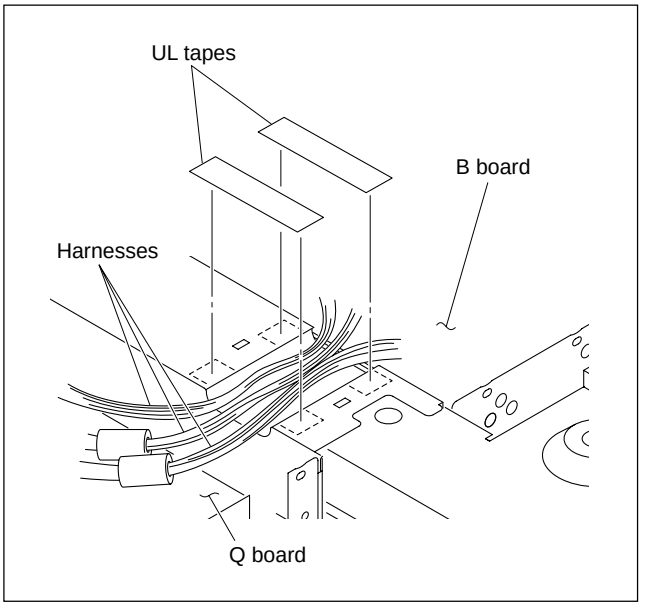
1. Remove the rear cover assembly.
   (Refer to Section 1-2-1.)
2. Remove the Q/B shield cover.
   (Refer to step 2 of Section 1-3-1.)
3. Remove the two UL tapes, then disconnect the eight harnesses and the flexible flat cable connected to the B board.
4. Remove the six screws, then remove the B board.
5. Remove the lithium battery from the battery holder on the B board.



6. Install the B board in the reverse order of steps 1 to 5.

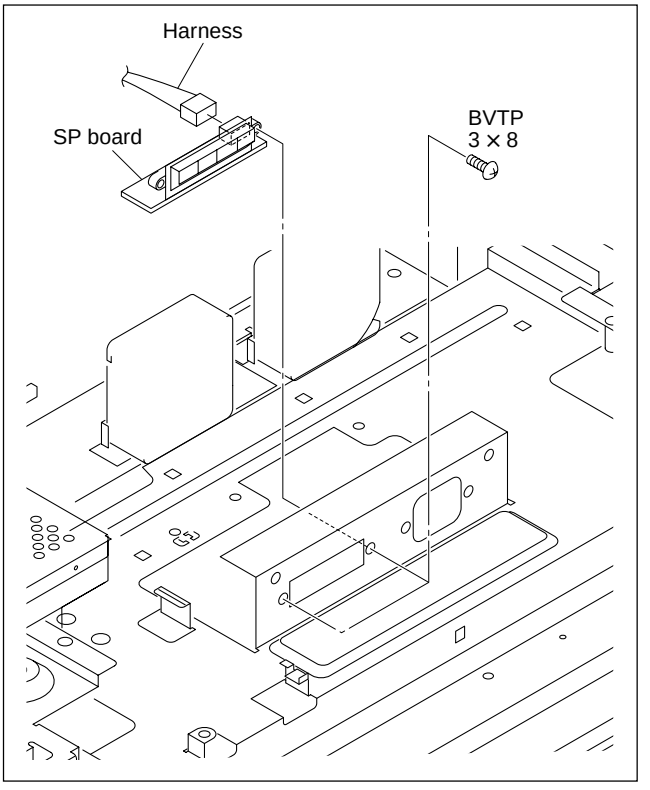
Note

Place and fix the harnesses to connect the Q board and B board as shown in the illustration.



1-3-3. SP Board

1. Remove the rear cover assembly.
   (Refer to Section 1-2-1.)
2. Remove the harness from the SP board.
3. Remove the two screws, then remove the SP board.



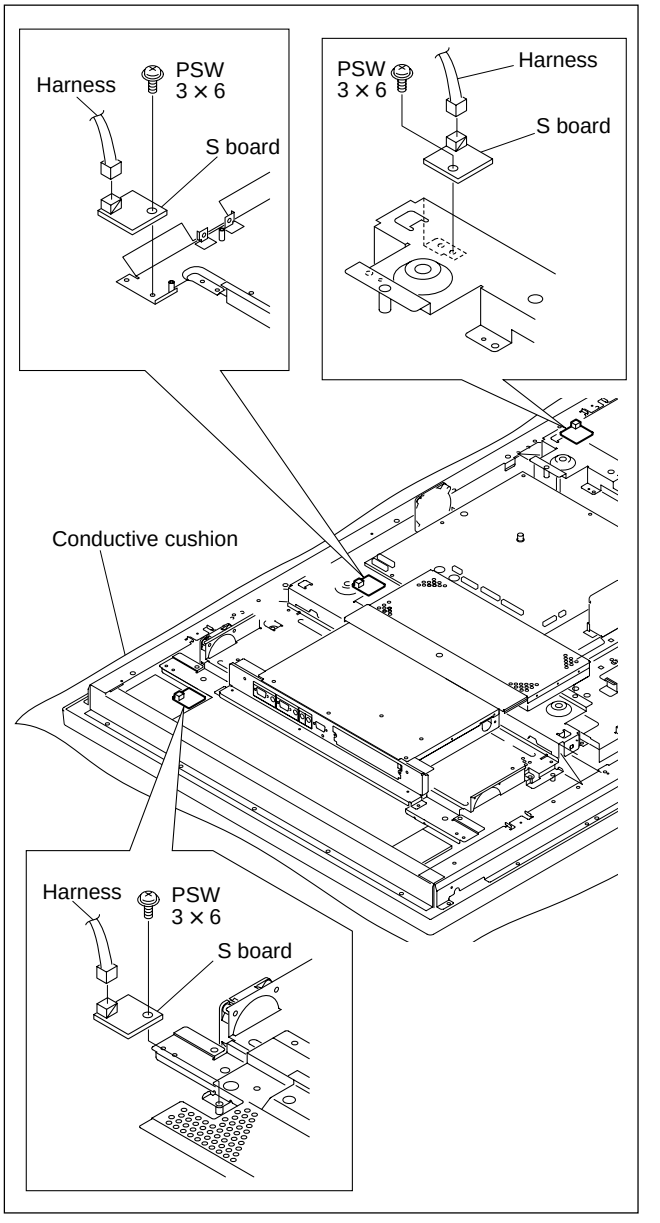
4. Install the SP board in the reverse order of steps 1 to 3.

1-3-4. S Board

Note

The three S boards are installed in this unit. When replacing them, remove/install in the same procedure.

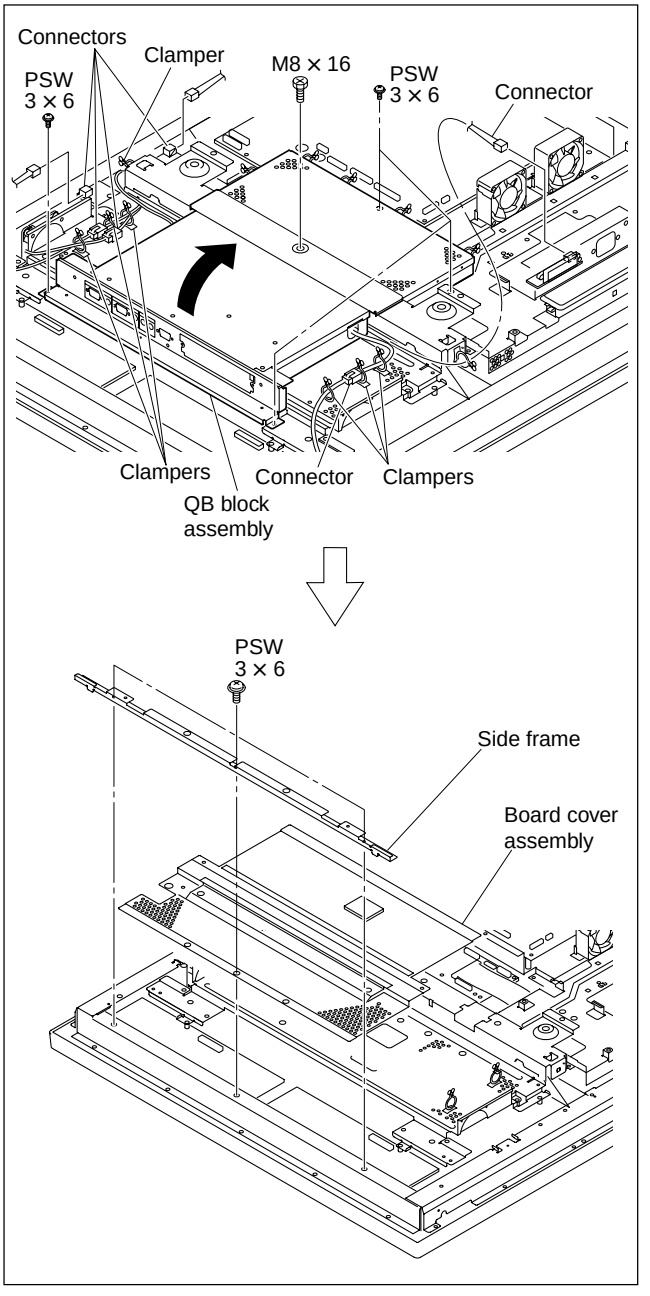
1. Remove the rear cover assembly.
   (Refer to Section 1-2-1.)
2. Disconnect the harness from the S board.
3. Remove the screw, then remove the S board.



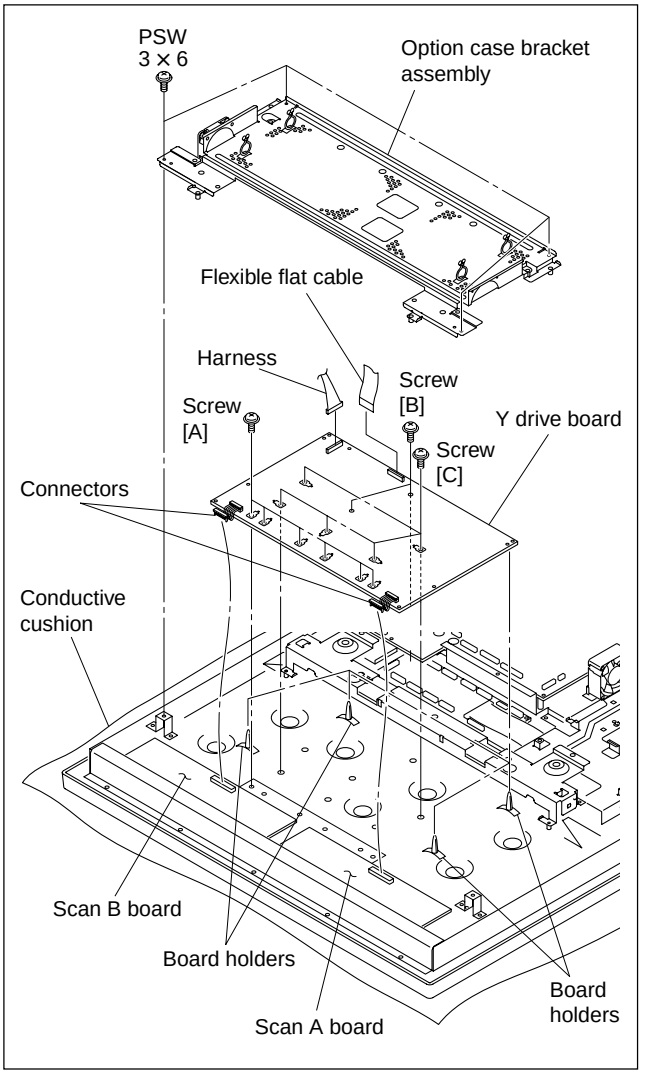
4. Install the S board in the reverse order of steps 1 to 3.

1-3-5. Y Drive Board

1. Remove the rear cover assembly. (Refer to Section 1-2-1.)
2. Remove the five connectors.
3. Remove the harness from the eight clampers.
4. Remove the bolt (M8 × 16) and four screws (PSW3 × 6), then remove the QB block assembly in the direction shown by the arrow.
5. Remove the three screws (PSW3 × 6), then remove the side frame and board cover assembly.



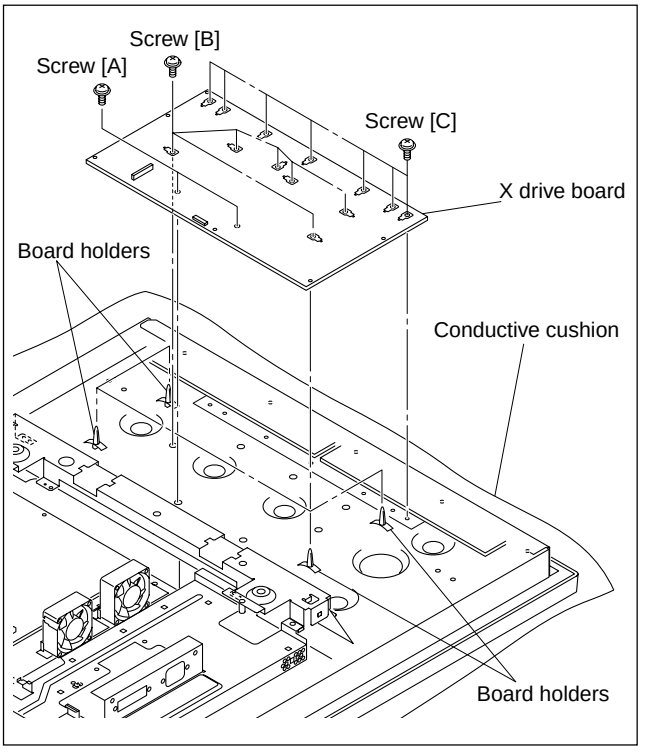
6. Remove the four screws, then remove the option case bracket assembly.
7. Disconnect the harness and flexible flat cable from the connectors on the Y drive board.
8. Remove the two connectors from the scan A board and scan B board.
9. Remove the two screws [B], six screws [A], five screws [C] and four board holders, then remove the Y drive board.



10. Install the Y drive board in the reverse order of steps 1 to 9.

1-3-6. X Drive Board

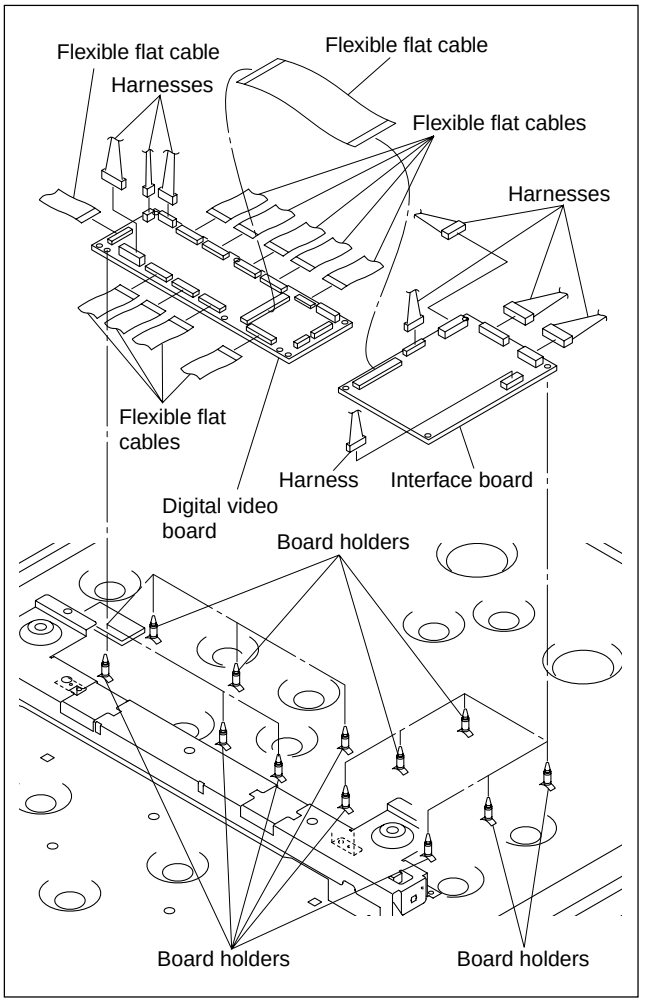
1. Remove the rear cover assembly.
   (Refer to Section 1-2-1.)
2. Disconnect the harness and flexible flat cable from the connectors on the X drive board.
3. Remove the two screws [A], six screws [C], five screws [B] and four board holders, then remove the X drive board.



4. Install the X drive board in the reverse order of steps 1 to 3.

1-3-7. Digital Video Board/Interface Board

1. Remove the rear cover assembly.
   (Refer to Section 1-2-1.)
2. Remove the QB block assembly.
3. Remove the power unit.
   (Refer to steps 2 and 3 of Section 1-4-1.)
4. Disconnect all harnesses and flexible flat cables from the connectors on the digital board.
5. Remove the six board holders, then remove the digital video board.
6. Disconnect all harnesses and flexible flat cables from the connectors on the interface board.
7. Remove the six board holders, then remove the interface board.



8. Install the digital video board and interface board in the reverse order of steps 1 to 7.

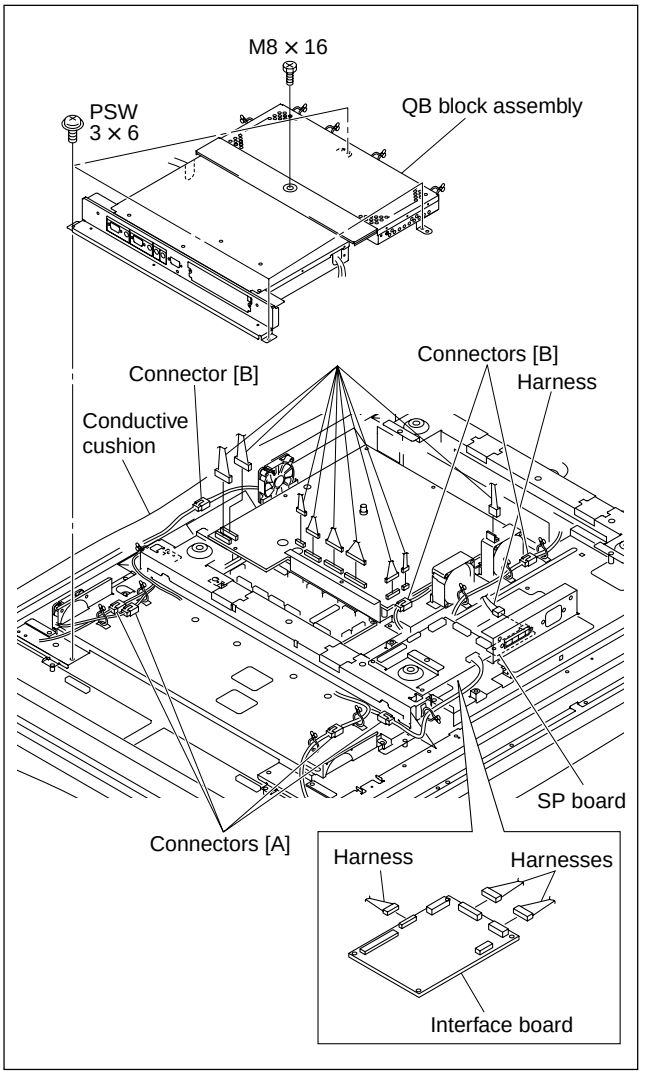
1-4. Replacing the Main Parts

1-4-1. Power Unit/DC Fan (For Power Supply)

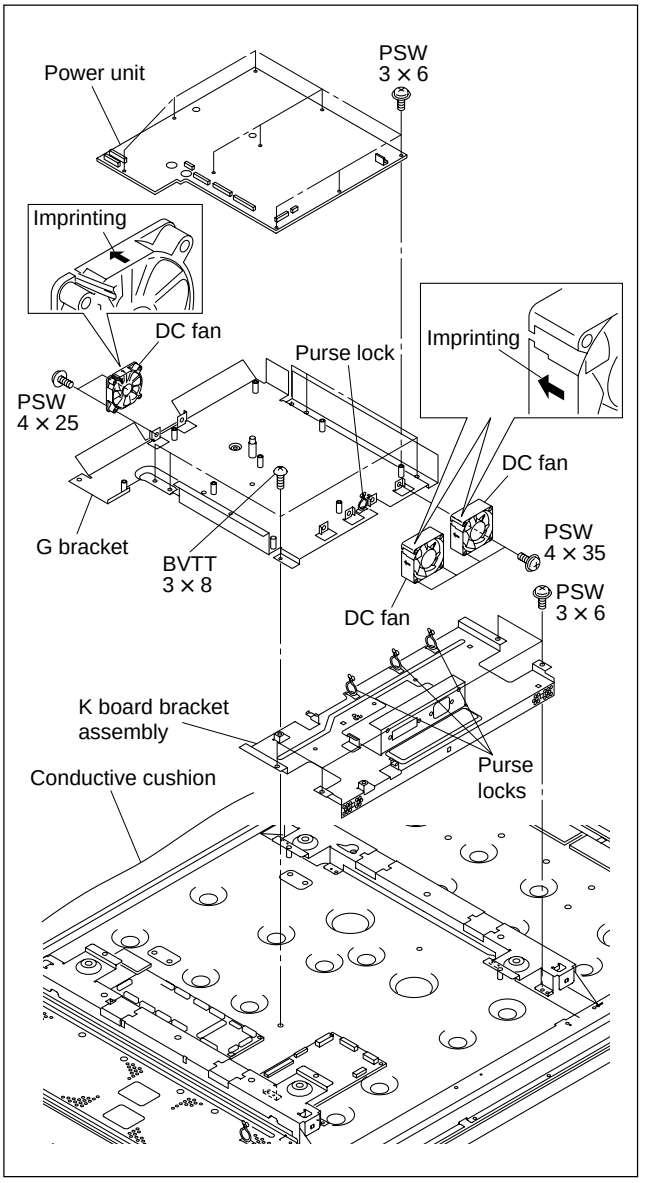
Note

When attaching the DC fan, make sure that the orientation of imprinting is correct.

1. Remove the rear cover assembly. (Refer to Section 1-2-1.)
2. Disconnect the nine harnesses from the connectors on the power unit.
3. Remove the bolt (M8 × 16) and four screws (PSW3 × 6), then remove the QB block assembly.
4. Remove the four connectors [A].
5. Remove the three connectors [B].
6. Disconnect the three harnesses from the connectors on the interface board.
7. Disconnect the harness from the connector on the SP board.



8. Remove the harness from the four purse locks.
9. Remove the four screws, then remove the K board bracket assembly.
10. Remove the four screws (BVTT3 × 6), then remove the G bracket.
11. Remove the two screws (PSW4 × 25), then remove the DC fan.
12. Remove the four screws (PSW4 × 35), then remove the two DC fans.
13. Remove the seven screws, then remove the power unit.



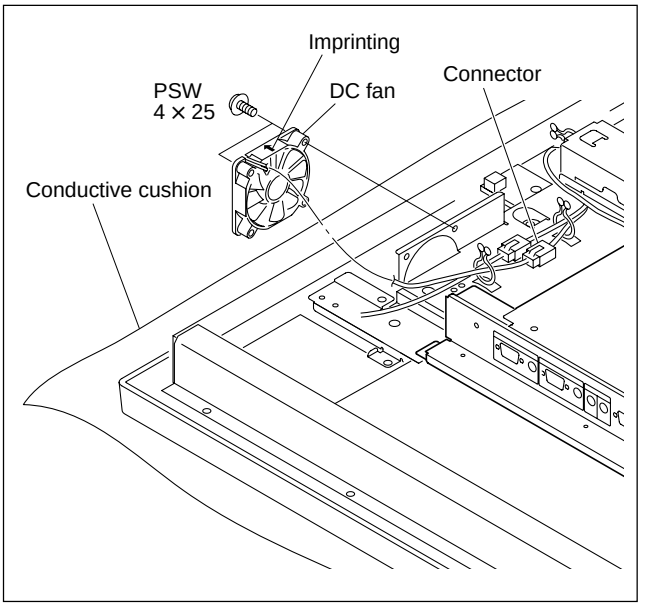
14. Attach the power unit and DC fan in the reverse order of steps 1 to 13.

1-4-2. DC Fan (For Q/B Mount)

Note

When attaching the DC fan, make sure that the orientation of imprinting is correct.

1. Remove the rear cover assembly.
   (Refer to Section 1-2-1.)
2. Remove the connector and two screws, then remove the DC fan.



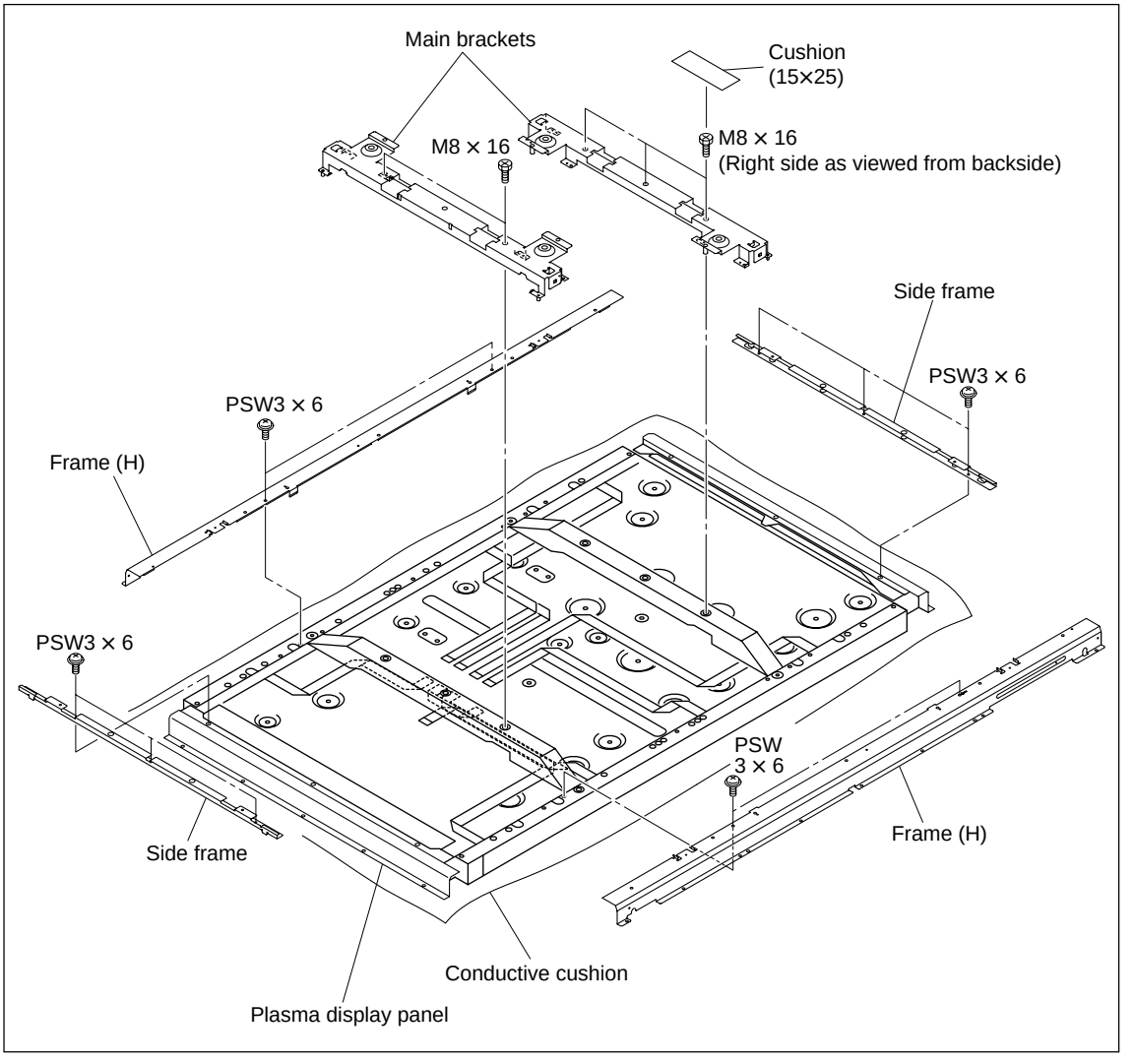
3. Attach the DC fan in the reverse order of steps 1 and 2.

1-4-3. Plasma Display Panel

Note

Be sure to replace the plasma display panel with two persons.

1. Remove the rear cover assembly. (Refer to Section 1-2-1.)
2. Remove the bezel assembly. (Refer to Section 1-2-2.)
3. Remove the QB block assembly. (Refer to Section 1-4-1.)
4. Remove the S board. (Refer to Section 1-3-4.)
5. Remove the Y drive board. (Refer to Section 1-3-5.)
6. Remove the X drive board. (Refer to Section 1-3-6.)
7. Remove the digital video board and interface board. (Refer to Section 1-3-7.)
8. Remove the power unit. (Refer to 1-4-1.)
9. Remove the cushions (15×25) attached to the heads of the three bolts on the right side as viewed from backside.
10. Remove the five bolts (M8 × 16), then remove the two main brackets.
11. Remove the four screws (PSW3 × 8), then remove the two frames (H).
12. Remove the six screws (PSW3 × 8), then remove the two side frames.



13. Attach the plasma display panel in the reverse order of steps 1 to 12.

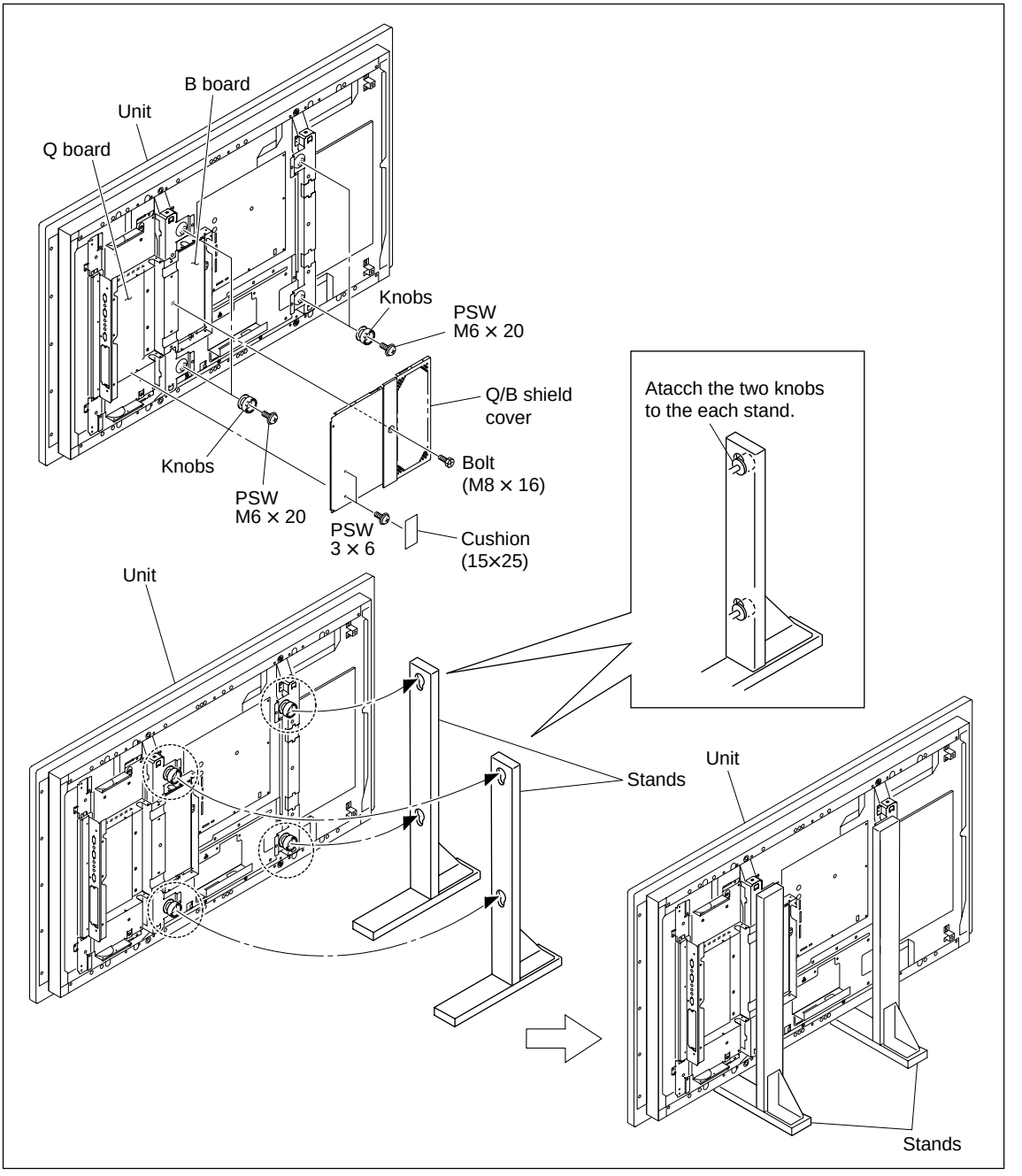
1-5. Service Position

1-5-1. Service Position of the B and Q Boards

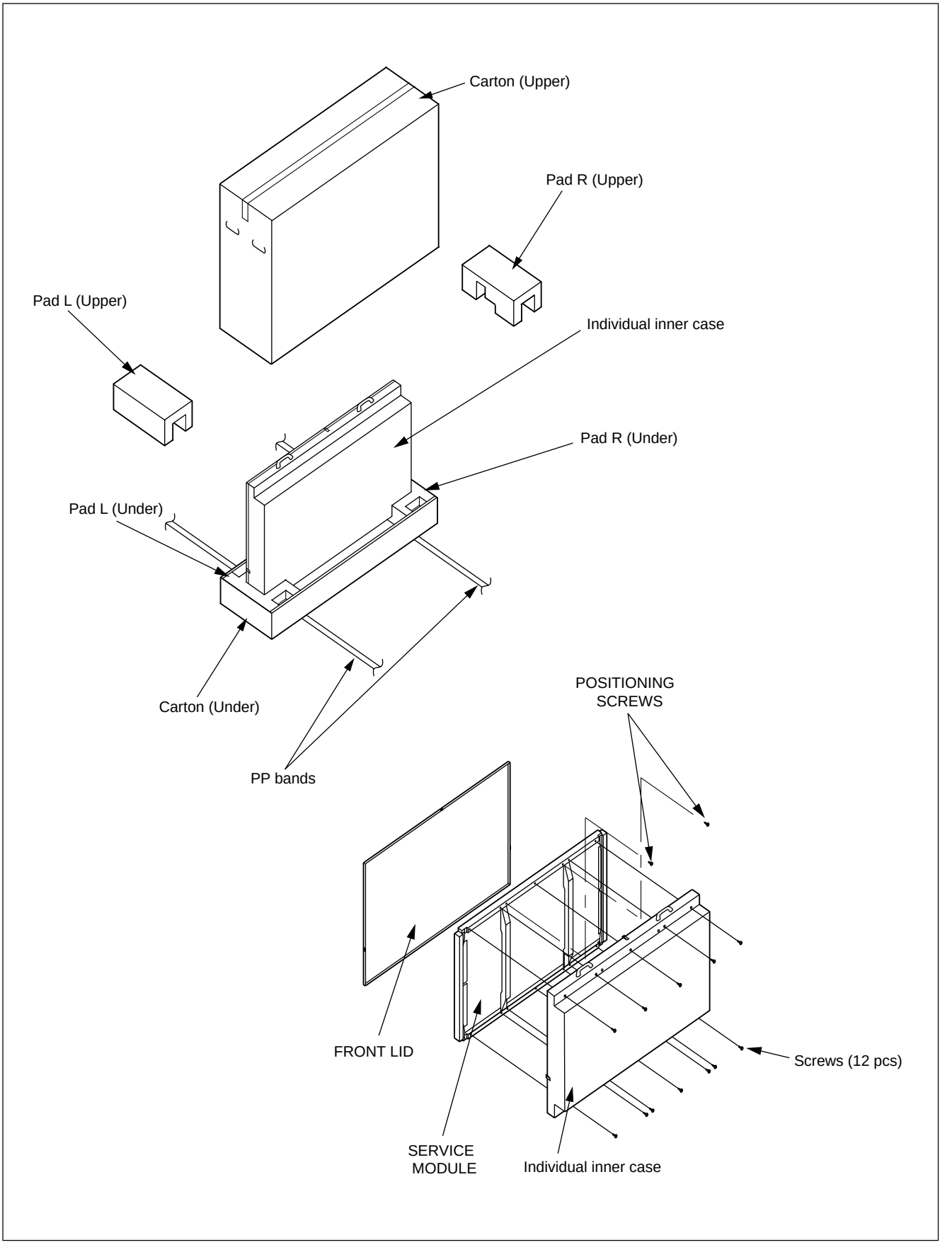
Notes

- Be sure to attach the stand with more than two persons.
- When attach the stand to the unit, check that four knobs are attached to the holes of the stand.

1. Remove the rear cover assembly. (Refer to Section 1-2-1.)
2. Remove the two cushions (15×25) attached to the two screws.
3. Remove the bolt (M8 × 16) and two screws, then remove the QB shield assembly.
4. Attach the four knobs to the unit by the four screws.
5. Attach the four knobs to the holes of the each stand.



1-6. Packaging of the Plasma Display Panel When It Is Shipped to Pioneer Corporation



1-7. Backup Battery Replacement

The B board contain the lithium battery for the clock.

CAUTION

When replacing the part, be sure to use the specified one below.

Replacement with a part other than the specified part will result in fire hazards and electric hazards.

Replacement part

Part description: Lithium battery (CR1220)
Part No.: ⚠1-756-157-11

Replacement

1. For removing the lithium battery, refer to steps 1 to 5 in Section 1-5-3.
2. Attach the lithium battery in the reverse order of steps.

1-8. Unleaded Solder

Boards requiring use of unleaded solder are printed with a lead free mark (LF) indicating the solder contains no lead. (Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)

: LEAD FREE MARK

Notes

- Be sure to use the unleaded solder for the printed circuit board printed with the lead free mark.
- The unleaded solder melts at a temperature about 40 °C higher than the ordinary solder, therefore, it is recommended to use the soldering iron having a temperature regulator.
- The ordinary soldering iron can be used but the iron tip has to be applied to the solder joint for a slightly longer time. The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful.

1-9. Warning on Power Connection

Use the proper power cord for your local power supply.

FWD-50PX1

	United States, Canada	Continental Europe		United Kingdom, Ireland, Australia, New Zealand	Japan
Plug type	VM0233	COX-07	636	– a)	VM1296
Female end	VM0089	COX-02	VM0310B	VM0303B	VM1313
Cord type	SVT	H05VV-F		CEE (13) 53rd (O.C)	HVCTF
Minimum cord set rating	10A/125V	10A/250V		10A/250V	10A/125V
Safety approval	UL/CSA	VDE		VDE	DENAN-HO

a) Note : Use an appropriate rating plug which is applied to local regulations.

Section 2
Electrical Adjustments

2-1. Equipment Required

- Oscilloscope
  Tektronix 2465 or equivalent
  (band width : 350 MHz or more)
- VG (Programmable video signal generator)
  VG814 or equivalent
- Frequency counter
  Advantest TR5821AK or equivalent
- Digital voltmeter
  Advantest TR6845 or equivalent
- Potential transformer
- Regulated DC power supply
- Remote commander (RM-980C)

Note

Perform the following adjustments at least 5 minutes after turning on the power.

2-2. Electrical Adjustments Using the Service Mode

The electrical adjustments can be performed using the remote commander RM-980C supplied with the FWD-50PX1. The remote commander has the Service Mode. Select the Service Mode to perform the electrical adjustments as listed below.

- **Service Mode**

When the machine enters the service mode, the "Service Mode" submenu is displayed in addition to the ordinary user menu. The electrical adjustment is executed using the "Service Mode" submenu.

Service Mode

EEPROM Initialize	Initializes the EEPROM
Chroma Decoder	Chroma decoder adjustment
AD Converter	A/D converter adjustment
White Balance	White balance adjustment
General	Other adjustments and the
Manual Control	functions required for check
Preset Edit	Factory check menu (Not used in service)
Service Status	Editing the preset signal
	Internal status check

How to enter the Service Mode using the RM-980C :
In the STANDBY state, press the keys in the following order.

DISPLAY → 5 → VOL+ → POWER ON

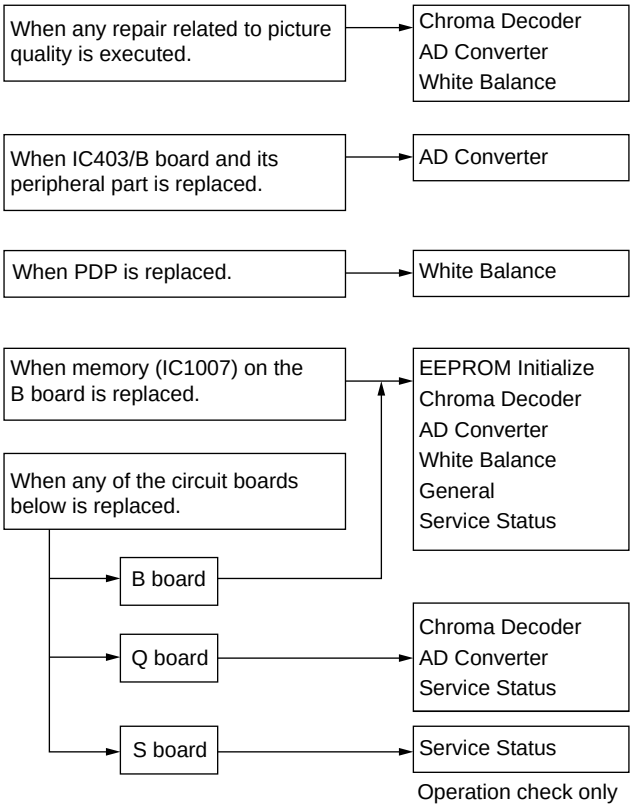
Press the STBY key once and back on to enter the STAND-BY state or turn off the main power to exit the Service Mode.

- **Operation of remote commander in the Service Mode**

The six keys of MENU, ENTER, ←, →, ↑ and ↓ are the basic operation keys in the same manner as in the user adjustment. The other keys can be operated in the same manner as in the user adjustment.

- **The electrical adjustments using the Service Mode become necessary in the following cases.**

When one of the following adjustments is made, adjustment using the service mode becomes necessary.



Service Mode

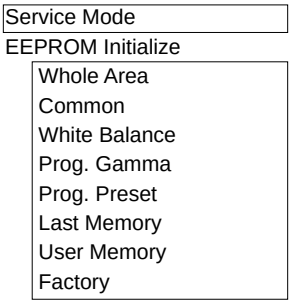
1. EEPROM Initialize

EEPROM Configuration

Table 1 (page 2-13) shows the configuration of EEPROM. The entire area or the respective areas of the EEPROM can be separately initialized.

Menu Structure

Select the desired area of EEPROM to be initialized using the following menu.



To initialize the desired area, firstly select the desired item from the EEPROM RESET menu. Change the selected item from “CANCEL” to “OK”. Then press “ENTER”.

a) Whole Area
It initializes whole area of EEPROM.
This command is identical to carrying out the all items of “Common”, “White Balance”, “Prog. Gamma”, “Prog. Preset”, “Last Memory”, “User Memory” and “Factory”.
Execute this command only when the memory (IC1007) on the B board is replaced.

b) Common
It initializes “Common (1)”, “Common (2)” and “Common (3)” of the “COMMON DATA AREA” shown in Table 1.
It initializes the data unique to the machine and the common data (various setup values of the user menu).
Do not carry out this command because it initializes the serial number and accumulative operation hours.

c) White Balance
It initializes “Color Temp (1)” and “ Color Temp (2)” of the “COMMON DATA AREA” shown in Table 1.
It initializes the color temperature “High”, “Mid” and “Low”, and all data of user setup 1 to 3 to 00.
It also initializes the user name to “User1”, “User2” and “User3”.

d) Prog. Gamma
This command is not used in this machine.

e) Prog. Preset
It initializes the “PRESET DATA AREA” (page 2-13) shown in Table 1.
It resets the backup preset area.

f) Last Memory
It initializes “LAST MEMORY AREA” (pages 2-13, 14) shown in Table 1.
It initializes the last memory data that user has adjusted for each signal.

g) User Memory
This command is not used in this machine.

h) Factory
It resets the EEPROM to the factory default status.
All of the EEPROM areas except the following are initialized by this command.

Items that are not initialized by the “FACTORY” RESET function.

In the COMMON DATA AREA

① Index Number stored in the Common (1) [General]
② Watch Error and Serial Number data stored in the Common (2) [General]
③ Service (1) [AD Converter] (Adjustment data of 2-4. AD Calibration Adjustment)
④ Service (2) [Chroma Decoder] (Adjustment data of 2-5. Sub Color, Sub Hue adjustment and 2-6. Video Decoder Adjustment)
⑤ Adjustment data in Color Temp (1) [Data & Name] at the factory except user adjustment value. (Adjustment data of 2-3. White Balance Adjustment)

2. Chroma Decoder

Menu structure

Hue and color of the video signal are adjusted.

Service Mode
Chroma Decoder

Hue		
Sub Contrast	:	8
Sub Color		
Sharp Gain	:	8
Sharp f0	:	3
Y Out Level	:	18
C Out Level	:	10
Y Delay		
Cb Offset	:	8
Cr Offset	:	8
By Adj (SECAM)	:	8
Ry Adj (SECAM)	:	8

a) Hue
To adjust NTSC signal hue, adjust “Hue (NTSC)” in the lower layer below this sub menu.
To adjust NTSC4.43 signal hue, adjust “Hue (NT443)” in the lower layer below this sub menu.
Adjustment range is from 0 to 63.

b) Sub Contrast
Adjustment range is from 0 to 63.
Fixed value : 8

c) Sub Color
Adjust “Col (NTSC)”, “Col (PAL)” and “Col (SECAM)” for the respective signals of NTSC, PAL and SECAM.
Adjustment range is from 0 to 15.
Fixed value for Col (NTSC) only : 6

d) Sharp Gain
Adjustment range is from 0 to 15.
Fixed value : 8

e) Sharp f0
Adjustment range is from 0 to 3.
Fixed value : 3

f) Y Out Level
Adjustment range is from 0 to 63.
Fixed value : 18

g) C Out Level
Receive the NTSC signal and adjust color. The color adjustment of PAL and SECAM signals are performed in c) Sub Color upon completion of the NTSC signal adjustment.
Adjustment range is from 0 to 63.

h) Y Delay
Y delay for the respective signals can be adjusted by “YDL (NTSC)”, “YDL (PAL)”, “YDL (SECAM), “YDL (NT443)”, “YDL (PALM)” and “YDL (PALN)”.
Adjustment range is from 0 to 15.
Fixed value : 5

i) Cb Offset
Adjustment range is from 0 to 15.
Fixed value : 8

j) Cr Offset
Adjustment range is from 0 to 15.
Fixed value : 8

k) By Adj (SECAM)
The blue offset when receiving the SECAM signal is adjusted.
Adjustment range is from 0 to 15.

l) Ry Adj (SECAM)
The red offset when receiving the SECAM signal is adjusted.
Adjustment range is from 0 to 15.

Sub Color and Sub Hue Adjustments

Refer to Section “2-5. Sub Color and Sub Hue Adjustment”.

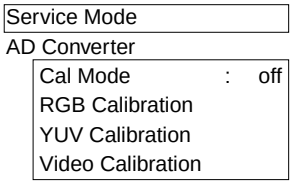
Video Decoder Adjustment

Refer to Section “2-6. Video Decoder Adjustment”.

3. AD Converter

Menu structure

This adjustment corrects non-uniformity among RGB (or YCbCr) channels of AD converter (IC403).



a) Cal Mode
Set to “On” to enter the calibration mode.
Off : Normal operation
On : Calibration mode

b) RGB Calibration
The RGB signals are calibrated.
The RGB signals are calibrated by “Sub Cont RGB”, “Red Gain”, “Green Gain”, “Blue Gain”, “Red Bias”, “Green Bias” and “Blue Bias” that are located in the lower layer below this sub menu.
Adjustment range is from 0 to 255 in each adjustment item.

c) YUV Calibration
The component video signal is calibrated.
The component video signal is calibrated by “Sub Cont YUV”, “Sub Brt YUV”, “Cb Offset YUV” and “Cr Offset YUV” that are located in the lower layer below this sub menu.
Adjustment range is from 0 to 255 for “Sub Cont YUV” and “Sub Brt YUV”, and from 0 to 63 for “Cb Offset YUV” and “Cr Offset YUV”.

d) Video Calibration
The composite video signal is calibrated.
The composite video signal is calibrated by “Sub Cont Video”, “Sub Brt Video”, “Cb Offset Video” and “Cr Offset Video” that are located in the lower layer below this sub menu.
Adjustment range is from 0 to 255 for “Sub Cont Video” and “Sub Brt Video”, and from 0 to 63 for “Cb Offset Video” and “Cr Offset Video”.

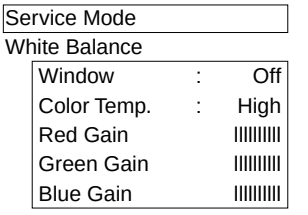
AD Calibration Adjustment

Refer to Section “2-4. AD Calibration Adjustment”.

4. White Balance

Menu structure

White balance of PDP panel is adjusted.



a) Window
This machine has the built-in window signal for white balanced adjustment. Select large window for suitable adjustment.
Off : Window is not displayed.
Small : Small window is displayed.
Large : All white is displayed.

b) Color Temp.
Select the desired color temperature that you want to adjust located in the lower layer below this submenu.
Select the desired color temperature from “High”, “Mid”, “Low”, “User 1”, “User 2” and “User 3”.

Note

“User 1”, “User 2” and “User 3” can be adjusted from the user menu, therefore they are not adjusted here.

c) Red Gain
Red gain of the selected “Color Temp.” is adjusted.
Adjustment range is from 0 to 255.

d) Green Gain
Green gain of the selected “Color Temp.” is adjusted.
Adjustment range is from 0 to 255.

e) Blue Gain
Blue gain of the selected “Color Temp.” is adjusted.
Adjustment range is from 0 to 255.

White Balance Adjustment

Refer to Section “2-3. White Balance Adjustment ”.

5. General

Menu structure

The data unique to the machine and the fan control are checked.

Service Mode
General

Blue Only	:	0
AGC Wide	:	14
AGC Narrow	:	13
32k Clock Out	:	Off
Watch Error	:	32.76800
Serial Number	:	2000001
Fan Status		
Vs/Va Setting		

a) Blue Only
When “1” is set, all colors of RGB displayed on the PDP become blue data level.

b) AGC Wide
This command is not used in this machine.

c) AGC Narrow
This command is not used in this machine.

d) 32k Clock Out
The clock signal that is used for the Watch Error adjustment is output.
Off : Not output.
On : Output

e) Watch Error
It corrects error of the built-in watch.
Set the measurement value of the frequency counter connected.
Adjustment range is from 32.76180 to 32.77420 kHz.

f) Serial Number
It sets serial number.

g) Fan Status

Menu structure

Service Mode
General
Fan Status

Fan Control	:	Manual
Ref Voltage	:	8.0[V]
F/B Voltage	:	8.0[V]
Drive Data		2B5F
P/S Temp	:	43[°C]
Temp1	:	43[°C]
Temp2	:	43[°C]
Temp3	:	43[°C]

Fan Control : You can set the 8.0 to 12.0 V to the fan drive voltage using [Ref Voltage]. Use this command for checking operation of the fan drive circuit.
(Factory default setting: 8.0 V)

Ref Voltage : You can set the any desired voltage to the fan drive voltage. Range of setting is from 8.0 V to 12.0 V, the setting value is saved.

F/B Voltage : It indicates the fan drive voltage. The voltage that is actually driving the fan is displayed as the setting voltage is being supplied.

Drive Data : It indicates the fan drive data.

P/S Temp : It indicates the temperature that is measured by the temperature sensor built in the power board.

Temp1 : It indicates the temperature that is measured by the S board attached on top of the BQ block assembly.

Temp2 : It indicates the temperature that is measured by the S board attached on top of the power board.

Temp3 : It indicates the temperature that is measured by the S board attached on the right side as viewed from backside.

6. Manual Control

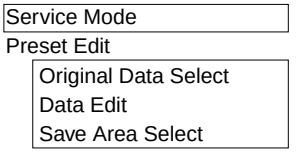
This submenu is used in factory for operation checks. Do not operate this function.

7. Preset Edit

Preset data structure

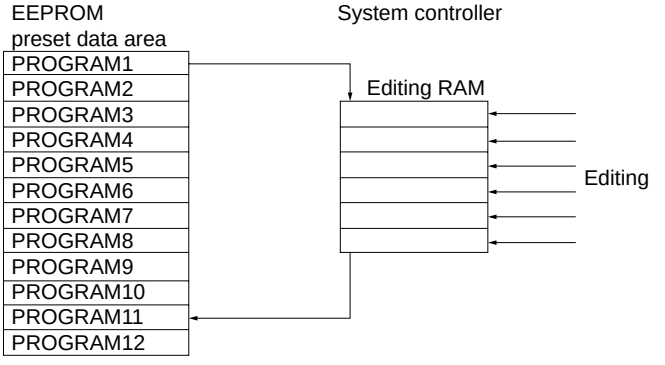
You can add the preset signals in addition to the default preset data.
The additional preset data are stored in [PROGRAM1] to [PROGRAM12] of [PRESET DATA AREA]. [PROGRAM13] to [PROGRAM30] are not used.

Menu structure



Editing procedure

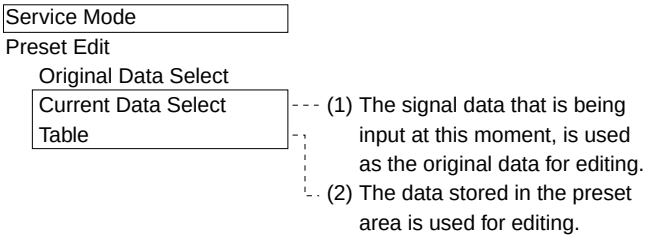
An independent memory area (editing RAM) is assigned for data editing inside the system controller as shown below. First, copy the source data for editing to the editing RAM. Then modify the data on the editing RAM and save the editing contents to the specified preset area of EEPROM. In addition to the default preset data that has been set already when shipped from the factory, you can edit the various data from the already saved data in EEPROM or the signal data that is being input at this moment.
(The following example shows the case the data stored in the EEPROM preset area No.2 is used for editing and the edited data is stored in the area No.11.)



a) Original Data Select

Menu structure

You can select the original data that is used for editing and copy the selected original data to the editing RAM.


Service Mode
Preset Edit
Original Data Select
Current Data Select
Table
(1) The signal data that is being input at this moment, is used as the original data for editing.
(2) The data stored in the preset area is used for editing.

(1) Current Data Select
When you select the signal data that is being input at this moment for editing, move the cursor to this item and press ENTER.
The selected data is copied to the editing RAM.
This mode is prepared for the case that the signal specification is unknown, and you can make editing by checking the image on screen.
Select the respective adjustment items and change the data as desired using the ↑/↓ key or the ←/→ key. The changed data are reflected on screen.
(If you press the ENTER key again, the screen returns to the previous menu.)
Among the adjustment items, the three types of adjustment [H Freq], [V Freq] and [Sync Pol] cannot be modified.

(2) Table
When you select the data stored in the preset area, move the cursor to this item and press ENTER. Select the desired data using the ↑/↓ key. The selected data is copied to the editing RAM.
This mode is prepared for the case that the signal specification is already known. You can make adjustment and edit data of all items but the modified data are not reflected to the actual picture images.

b) Data Edit

Menu structure

You can edit the data contents of the editing RAM.

Service Mode
Preset Edit
Data Edit

H Freq	:	031.469[kHz]	-- (1) Horizontal frequency
V Freq	:	059.94[Hz]	-- (2) Vertical frequency
Sync Pol	:	N/N	-- (3) Sync signal polarity
H. Total Pixel	:	800	-- (4) Total number of dots within horizontal
H. Active Pixel	:	640	-- (5) Horizontal resolution power
H. Sync Pixel	:	96	-- (6) Number of dots of horizontal sync signal
H. BP Pixel	:	48	-- (7) Number of dots during the horizontal back porch
V. total Line	:	525	-- (8) Total number of vertical lines
V. Active Line	:	480	-- (9) Vertical resolution power (number of lines)
V. Sync Line	:	2	-- (10) Total number of lines of vertical sync signal
V. BP Line	:	33	-- (11) Number of lines during the vertical back porch
Clamp Posi	:	60	-- (12) Clamp pulse position
Clamp Width	:	8	-- (13) Clamp pulse width (number of dots)
Format Flag			-- (14) Format flag
Picture Mode	:	Standard	-- (15) Picture quality mode
Color Matrix	:	12	-- (16) Color difference matrix
Zoom Mode	:	4/3	-- (17) Wide selection

(1) H Freq
It sets the horizontal frequency.

Note

When “Current Data Select” is selected in the Original Data Select, this item cannot be modified because the presently entered signal is selected for editing.

(2) V Freq
It sets the vertical frequency.

Note

When “Current Data Select” is selected in the Original Data Select, this item cannot be modified because the presently entered signal is selected for editing.

(3) Sync Pol
It sets the sync signal polarity. Sync polarities are displayed in the order of “Horizontal/Vertical”.

Sync Pol : N/N
Horizontal sync polarity
Vertical sync polarity

When you set the sync signal polarity, set it as shown below.
Negative polarity : N
Positive polarity : P
SOG : SOG

Note

When “Current Data Select” is selected in the Original Data Select, this item cannot be modified because the presently entered signal is selected for editing.

(4) H. Total Pixel
It sets the total number of dots within a single horizontal cycle.
This setup value becomes the default value of the user menu “Total H Pixel”.

Note

You should set in a way that number of H. Total Pixels is equal or more than sum of (H. Active Pixel +H. Sync Pixel +H. BP Pixel).

(5) H. Active Pixel
It sets the horizontal resolution power.

(6) H. Sync Pixel
It sets the number of dots of horizontal sync signal.

(7) H. BP Pixel
It sets the number of dots during the horizontal back porch.

(8) V. total Line
It sets the total number of vertical lines.

Note

You should set in a way that number of V. Total Line is equal or more than sum of (V. Active Line + V. Sync Line + V. BP Line).

(9) V. Active Pixel
It sets the vertical resolution power.

(10) V. Sync Line
It sets the total number of lines of vertical sync signal.

(11) V. BP Pixel
It sets the number of lines during the vertical back porch.

(12) Clamp Posi
It sets clamp pulse position.
The clamp pulse position is set starting (when data is 0) from the trailing edge of the horizontal sync signal. When this value is increased, picture moves toward the picture area.
The clamp pulse generation position Tcp is given by the equation below starting from the trailing edge of sync signal.
Tcp = Clamp Posi/(Horizontal sync frequency × H. Total Pixel) [seconds]

(13) Clamp Width
It sets the clamp pulse width.
The clamp pulse width increases starting from the position that is set by the Clamp Posi. When this value is increased, the clamp pulse width is widened in the direction toward picture area.
The clamp pulse width Wcp is given by the equation below.
Wcp = Clamp Width/(Horizontal sync frequency × H. Total Pixel) [seconds]

(14) Format Flag
It sets ON/OFF of the following respective items in units of bit.

0	0	0	0	0	0	0	0	1 : ON
				①	②	③	④	0 : OFF

Upper 4 bits are not used.

① Setting the IP converter
Set to OFF during normal operation.

② Setting interlace
It sets the interlace input.
ON : When the input signal is the interlaced signal.
OFF : When the input signal is the progressive signal.

③ Setting to enable the “dot adjustment”
It enables or disables the “dot adjustment” in the user menu.
ON : The “dot adjustment” is enabled in the user menu.
OFF : The “dot adjustment” is disabled in the user menu.
If the actual input signal specification is different from the setups of “H. Total Pixel” and “H. Active Pixel” due to fetching the interlace, set this item to OFF.

④ Frame synchronization setting
It sets synchronization setting of the picture input to scan converter.
ON : Vertical sync of PDP panel synchronizes with the input signal.
OFF : The PDP panel display signal is no more synchronized with the input signal. When the motion picture is going to be displayed, set this item to ON.

Note

This item can be set to ON only when the vertical frequency of input signal is in the range from 50 to 60 Hz.

(15) Picture Mode
It sets the picture quality mode. Select the desired mode from “Standard”, “Vivid”, “User1”, “User2” or “User3”.
This setting becomes the default value of the “Picture Mode” of user menu.

(16)Color Matrix

It sets the color difference matrix when the color difference component signal is input.

Either “12” or “13” can be set.

12 : In the case when the signal conforms to SMPTE293M.

13 : In the case when the signal conforms to SMPTE274M.

(17)Zoom Mode

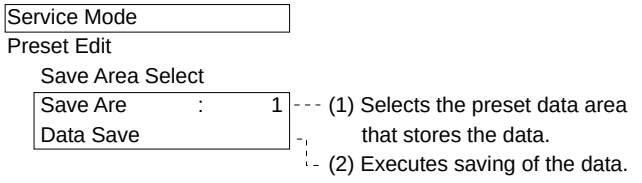
It sets the wide selection. Select the desired mode from “Expd. 4/3”, “Letterbx”, “Restore”, “Subtitle” or “4/3”.

This setting becomes the default value of the “Zoom Mode” of user menu.

c) Save Area Select

Menu structure

It saves the data of the editing RAM to the preset area.


Service Mode
Preset Edit
Save Area Select
Save Are : 1
Data Save
(1) Selects the preset data area that stores the data.
(2) Executes saving of the data.

(1) Save Area

It selects the preset data area that saves contents of the editing RAM.

Select the desired area from “PROGRAM1” to “PROGRAM12”.

(2) Data Save

It carries out saving of the data into the area that is selected by the Save Area.

Change the menu item from [Cancel] to [OK] and press [ENTER].

Note

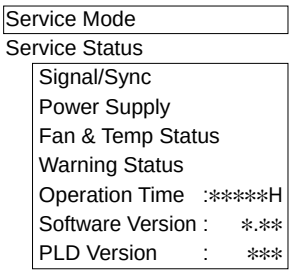
You can judge coincidence of the preset data with the input signal using the sync signal polarity of horizontal/vertical frequencies.

If the same sync signal data exists within a preset area, the specification that has the smaller preset number has priority.

8. Service Status

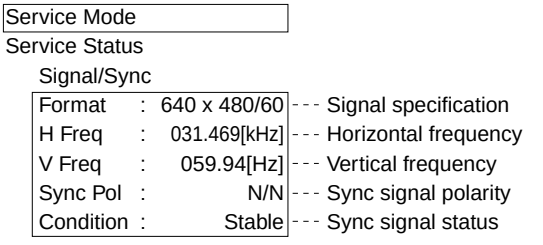
Menu structure

You can check the internal status of this unit.



a) Signal/Sync

Menu structure



The sync signal status of the input signal is displayed.

Format : The preset signal name for the input signal is displayed.

H Freq : Horizontal frequency of the input is displayed in 6 digits.

V Freq : Vertical frequency of the input is displayed in 5 digits.

Sync Pol : Sync signal polarity is displayed.

Horizontal sync signal/Vertical sync signal

N: NEGA

P: POSI

Conditions : Sync signal status is displayed.

Stable : Stable

Insecure : Unstable

No Sync : Sync signal does not exist.

b) Power Supply

Menu structure

```
Service Mode
Service Status
    Power Supply
Digital 5 V   :  5.0[V]  --- 5 V for digital circuit
Digital 3 V   :  3.3[V]  --- 3 V for digital circuit
Analog 6 V    :  6.0[V]  --- 6 V for analog circuit
```

Main DC voltages of the machine are displayed.

Digital 5 V : Internal 5 V power supply voltage is displayed.

Digital 3 V : Internal 3.3 V power supply voltage is displayed.

Analog 6 V : Internal 6 V power supply voltage is displayed.

c) Fan & Temp Status

Menu structure

```
Service Mode
Service Status
    Fan&Temp Status
Fan Drive     :  OK
Fan           :  OK
P/S Temp      :  OK

P/S Temp      :  44[°C]
NO ACK DEV    :  0004
```

The internal temperature of the machine and the fan operating status are displayed.

Fan Drive : Operating status of the fan drive circuit is displayed. [OK] appears when it operates normally. [NG] appears when it does not operate normally.

Fan : Operating status of the fan is displayed. [OK] appears when all fans operate normally. [NG] appears when any one of the fans does not operate normally.

P/S Temp : Temperature status inside the power supply block is displayed. [OK] appears when temperature is normal. [NG] appears when temperature is abnormal.

P/S Temp : Temperature inside the power supply block is displayed.

NO ACK DEV : Status whether the communication with the respective devices that are controlled by the I^2C bus is established or not is displayed.

When the value that is displayed on the PDP panel is converted to the binary number, each bit has the following meaning.

Bit 0 : Audio Processor Each bit 0 : OK, 1 : NG
Bit 1 : Audio Switch
Bit 2 : AV Switch
Bit 3 : Closed Caption Decoder
Bit 4 : 3D Comb filter
Bit 5 : Chroma Decoder
Bit 6 : PDP
Bit 7 : Tuner (No Use for PFM)
Bit 8 : Auto Wide Decoder
Bit 9 : AD Converter
Bit 10 : EEPROM
Bit 11 : IP Converter (System IC)
Bit 12 : OSD (No Use for PFM)
Bit 13 : PLD (No Use for PFM)
Bit 14 : RTC (No Use for PFM)
Bit 15 : Scan Converter (No Use for PFM)

Note

This machine is not equipped with the AV switch, therefore bit 2 always goes to 1.

d) Warning Status

Menu structure

Service Mode
Service Status
Warning Status

EEP ID	:	OK
EEP Save	:	OK
EEP Load	:	OK
RTC Init	:	OK
RTC VDET	:	OK
RTC XSTOP	:	OK
PDP Init	:	OK
DEC Init	:	OK
DC Init	:	OK
Power Off	:	OK

The warning information is displayed.

EEP ID : ID CODE error
EEP Save : Data write error
EEP Load : Data read error
RTC Init : Watch initialization error
RTC VDET : Watch power voltage error (1.8 V or less)
RTC XSTOP : Watch oscillator error
PDP Init : PDP initialization error
DEC Init : Chroma decoder initialization error
DC Init : Power voltage (digital system 5 V, digital system 3.3 V, analog system 6 V) error
Power Off : Power-off sequence error

e) Operation Time
Accumulative operating hours are indicated. (In units of hour)
f) Software Version
Software version is indicated.
g) PLD Version
PLD version is indicated.

Table 1. EEPROM memory map

Name		Address
COMMON DATA AREA	Common (1) [General]	0x0000 to 0x001F
	Common (2) [General]	0x0020 to 0x003F
	Common (3) [Parental Control]	0x0040 to 0x005F
	System	0x0060 to 0x007F
	Service (1) [AD Converter]	0x0080 to 0x009F
	Service (2) [Chroma Decoder]	0x00A0 to 0x00BF
	Service (3) [IP Converter]	0x00C0 to 0x00DF
	Reserved	0x00E0 to 0x00FF
	Reserved	0x0100 to 0x011F
	Color Temp (1) [Data & Name]	0x0120 to 0x013F
	Reserved	0x0140 to 0x015F
	Programmable Gamma	0x0160 to 0x017F
PRESET DATA AREA	PROGRAM1	0x0240 to 0x025F
	PROGRAM2	0x0260 to 0x027F
	PROGRAM3	0x0280 to 0x029F
	PROGRAM4	0x02A0 to 0x02BF
	PROGRAM5	0x02C0 to 0x02DF
	PROGRAM6	0x02E0 to 0x02FF
	PROGRAM7	0x0300 to 0x031F
	PROGRAM8	0x0320 to 0x033F
	PROGRAM9	0x0340 to 0x035F
	PROGRAM10	0x0360 to 0x037F
	PROGRAM11	0x0380 to 0x039F
	PROGRAM12	0x03A0 to 0x03BF
	Reserved	0x03C0 to 0x03DF
	Reserved	0x03E0 to 0x03FF
	Reserved	0x0400 to 0x041F
	Reserved	0x0420 to 0x043F
	Reserved	0x0440 to 0x045F
	Reserved	0x0460 to 0x047F
	Reserved	0x0480 to 0x049F
	Reserved	0x04A0 to 0x04BF
	Reserved	0x04C0 to 0x04DF
	Reserved	0x04E0 to 0x04FF
	Reserved	0x0500 to 0x051F
	Reserved	0x0520 to 0x053F
	Reserved	0x0540 to 0x055F
	Reserved	0x0560 to 0x057F
	Reserved	0x0580 to 0x059F
	Reserved	0x05A0 to 0x05BF
	Reserved	0x05C0 to 0x05DF
	Reserved	0x05E0 to 0x05FF

Name		Address
LAST MEMORY AREA	Area 1	0x0600 to 0x061F
		0x0620 to 0x063F
		0x0640 to 0x065F
		0x0660 to 0x067F
	Area 2	0x0680 to 0x069F
		0x06A0 to 0x06BF
		0x06C0 to 0x06DF
		0x06E0 to 0x06FF
	Area 3	0x0700 to 0x071F
		0x0720 to 0x073F
		0x0740 to 0x075F
		0x0760 to 0x077F
	Area 4	0x0780 to 0x079F
		0x07A0 to 0x07BF
		0x07C0 to 0x07DF
		0x07E0 to 0x07FF
	Area 5	0x0800 to 0x081F
		0x0820 to 0x083F
		0x0840 to 0x085F
		0x0860 to 0x087F
	Area 6	0x0880 to 0x089F
		0x08A0 to 0x08BF
		0x08C0 to 0x08DF
		0x08E0 to 0x08FF
	Area 7	0x0900 to 0x091F
		0x0920 to 0x093F
		0x0940 to 0x095F
		0x0960 to 0x097F
	Area 8	0x0980 to 0x099F
		0x09A0 to 0x09BF
		0x09C0 to 0x09DF
		0x09E0 to 0x09FF
	Area 9	0x0A00 to 0x0A1F
		0x0A20 to 0x0A3F
		0x0A40 to 0x0A5F
		0x0A60 to 0x0A7F
	Area 10	0x0A80 to 0x0A9F
		0x0AA0 to 0x0ABF
		0x0AC0 to 0x0ADF
		0x0AE0 to 0x0AFF

Name		Address
LAST MEMORY AREA	Area 11	0x0B00 to 0x0B1F
		0x0B20 to 0x0B3F
		0x0B40 to 0x0B5F
		0x0B60 to 0x0B7F
	Area 12	0x0B80 to 0x0B9F
		0x0BA0 to 0x0BBF
		0x0BC0 to 0x0BDF
		0x0BE0 to 0x0BFF
	Area 13	0x0C00 to 0x0C1F
		0x0C20 to 0x0C3F
		0x0C40 to 0x0C5F
		0x0C60 to 0x0C7F
	Area 14	0x0C80 to 0x0C9F
		0x0CA0 to 0x0CBF
		0x0CC0 to 0x0CDF
		0x0CE0 to 0x0CFF
	Area 15	0x0D00 to 0x0D1F
		0x0D20 to 0x0D3F
		0x0D40 to 0x0D5F
		0x0D60 to 0x0D7F
	Area 16	0x0D80 to 0x0D9F
		0x0DA0 to 0x0DBF
		0x0DC0 to 0x0DDF
		0x0DE0 to 0x0DFF
	Area 17	0x0E00 to 0x0E1F
		0x0E20 to 0x0E3F
		0x0E40 to 0x0E5F
		0x0E60 to 0x0E7F
	Area 18	0x0E80 to 0x0E9F
		0x0EA0 to 0x0EBF
		0x0EC0 to 0x0EDF
		0x0EE0 to 0x0EFF
	Area 19	0x0F00 to 0x0F1F
		0x0F20 to 0x0F3F
		0x0F40 to 0x0F5F
		0x0F60 to 0x0F7F
	Area 20	0x0F80 to 0x0F9F
		0x0FA0 to 0x0FBF
		0x0FC0 to 0x0FDF
		0x0FE0 to 0x0FFF
	Area 21	0x1000 to 0x101F
		0x1020 to 0x103F
		0x1040 to 0x105F
		0x1060 to 0x107F

Name		Address
LAST MEMORY AREA	Area 22	0x1080 to 0x109F
		0x10A0 to 0x10BF
		0x10C0 to 0x10DF
		0x10E0 to 0x10FF
	Area 23	0x1100 to 0x111F
		0x1120 to 0x113F
		0x1140 to 0x115F
		0x1160 to 0x117F
	Area 24	0x1180 to 0x119F
		0x11A0 to 0x11BF
		0x11C0 to 0x11DF
		0x11E0 to 0x11FF
	Area 25	0x1200 to 0x121F
		0x1220 to 0x123F
		0x1240 to 0x125F
		0x1260 to 0x127F
	Area 26	0x1280 to 0x129F
		0x12A0 to 0x12BF
		0x12C0 to 0x12DF
		0x12E0 to 0x12FF
	Area 27	0x1300 to 0x131F
		0x1320 to 0x133F
		0x1340 to 0x135F
		0x1360 to 0x137F
	Area 28	0x1380 to 0x139F
		0x13A0 to 0x13BF
		0x13C0 to 0x13DF
		0x13E0 to 0x13FF
	Area 29	0x1400 to 0x141F
		0x1420 to 0x143F
		0x1440 to 0x145F
		0x1460 to 0x147F
	Area 30	0x1480 to 0x149F
		0x14A0 to 0x14BF
		0x14C0 to 0x14DF
		0x14E0 to 0x14FF
	Area 31	0x1500 to 0x151F
		0x1520 to 0x153F
		0x1540 to 0x155F
		0x1560 to 0x157F
	Area 32	0x1580 to 0x159F
		0x15A0 to 0x15BF
		0x15C0 to 0x15DF
		0x15E0 to 0x15FF

Name		Address
Reserved	Area 1	0x1600 to 0x161F
		0x1620 to 0x163F
		0x1640 to 0x165F
		0x1660 to 0x167F
	Area 2	0x1680 to 0x169F
		0x16A0 to 0x16BF
		0x16C0 to 0x16DF
		0x16E0 to 0x16FF
	Area 3	0x1700 to 0x171F
		0x1720 to 0x173F
		0x1740 to 0x175F
		0x1760 to 0x177F
	Area 4	0x1780 to 0x179F
		0x17A0 to 0x17BF
		0x17C0 to 0x17DF
		0x17E0 to 0x17FF
	Area 5	0x1800 to 0x181F
		0x1820 to 0x183F
		0x1840 to 0x185F
		0x1860 to 0x187F
	Area 6	0x1880 to 0x189F
		0x18A0 to 0x18BF
		0x18C0 to 0x18DF
		0x18E0 to 0x18FF
	Area 7	0x1900 to 0x191F
		0x1920 to 0x193F
		0x1940 to 0x195F
		0x1960 to 0x197F
	Area 8	0x1980 to 0x199F
		0x19A0 to 0x19BF
		0x19C0 to 0x19DF
		0x19E0 to 0x19FF
	Area 9	0x1A00 to 0x1A1F
		0x1A20 to 0x1A3F
		0x1A40 to 0x1A5F
		0x1A60 to 0x1A7F
	Area 10	0x1A80 to 0x1A9F
		0x1AA0 to 0x1ABF
		0x1AC0 to 0x1ADF
		0x1AE0 to 0x1AFF
	Area 11	0x1B00 to 0x1B1F
		0x1B20 to 0x1B3F
		0x1B40 to 0x1B5F
		0x1B60 to 0x1B7F

Name		Address
Reserved	Area 12	0x1B80 to 0x1B9F
		0x1BA0 to 0x1BBF
		0x1BC0 to 0x1BDF
		0x1BE0 to 0x1BFF
	Area 13	0x1C00 to 0x1C1F
		0x1C20 to 0x1C3F
		0x1C40 to 0x1C5F
		0x1C60 to 0x1C7F
	Area 14	0x1C80 to 0x1C9F
		0x1CA0 to 0x1CBF
		0x1CC0 to 0x1CDF
		0x1CE0 to 0x1CFF
	Area 15	0x1D00 to 0x1D1F
		0x1D20 to 0x1D3F
		0x1D40 to 0x1D5F
		0x1D60 to 0x1D7F
	Area 16	0x1D80 to 0x1D9F
		0x1DA0 to 0x1DBF
		0x1DC0 to 0x1DDF
		0x1DE0 to 0x1DFF
	Area 17	0x1E00 to 0x1E1F
		0x1E20 to 0x1E3F
		0x1E40 to 0x1E5F
		0x1E60 to 0x1E7F
	Area 18	0x1E80 to 0x1E9F
		0x1EA0 to 0x1EBF
		0x1EC0 to 0x1EDF
		0x1EE0 to 0x1EFF
	Area 19	0x1F00 to 0x1F1F
		0x1F20 to 0x1F3F
		0x1F40 to 0x1F5F
		0x1F60 to 0x1F7F
	Area 20	0x1F80 to 0x1F9F
		0x1FA0 to 0x1FBF
		0x1FC0 to 0x1FDF
		0x1FE0 to 0x1FFF

Table 2. Factory Preset Data

	Format	Name	Resolution	Signal	Scanning	Clock	Horizontal (dots)						
			H(dot) × V(line)	Type	Format	[MHz]	H-FREQ [kHz]	H. TOTAL	H. BLK	H. FP	H. SYNC	H. BP	H. ACTIV
1	VGA	640×350@70Hz	640 × 350	RGB	Progressive	25.174	31.469	800	160	16	96	48	640
2	VESA	640×350@85Hz		RGB	Progressive	31.500	37.861	832	192	32	64	96	640
3	VESA	640×400@85Hz	640 × 400	RGB	Progressive	31.500	37.861	832	192	32	64	96	640
4	VESA	640×480@60Hz	640 × 480	RGB	Progressive	25.175	31.469	800	160	16	96	48	640
5	MAC	13inch		RGB	Progressive	30.240	35.000	864	224	64	64	96	640
6	VESA	640×480@72Hz		RGB	Progressive	31.500	37.861	832	192	24	40	128	640
7	VESA	640×480@75Hz		RGB	Progressive	31.500	37.500	840	200	16	64	120	640
8	VESA	640×480@85Hz		RGB	Progressive	36.000	43.269	832	192	56	56	80	640
9	VGA	720×400@70Hz	720 × 400	RGB	Progressive	28.321	31.469	900	180	18	108	54	720
10	VESA	720×400@85Hz		RGB	Progressive	35.500	37.927	936	216	36	72	108	720
11	IO_DATA	852×480@60Hz	852 × 480	RGB	Progressive	34.304	32.000	1072	220	28	128	64	852
12	MATROX_S1	856×480@60Hz	856 × 480	RGB	Progressive	33.627	30.240	1112	256	48	104	104	856
13	MATROX_S2	856×480@60Hz		RGB	Progressive	31.500	30.057	1048	192	32	64	96	856
14	MATROX_S3	856×480@60Hz		RGB	Progressive	31.500	30.057	1048	192	32	64	96	856
15	VESA	800×600@56Hz	800 × 600	RGB	Progressive	36.000	35.156	1024	224	24	72	128	800
16	VESA	800×600@60Hz		RGB	Progressive	40.000	37.879	1056	256	40	128	88	800
17	VESA	800×600@72Hz		RGB	Progressive	50.000	48.077	1040	240	56	120	64	800
18	VESA	800×600@75Hz		RGB	Progressive	49.500	46.875	1056	256	16	80	160	800
19	VESA	800×600@85Hz		RGB	Progressive	56.250	53.674	1048	248	32	64	152	800
20	VESA	848×480@60Hz	848 × 480	RGB	Progressive	33.750	31.020	1088	240	16	112	112	848
21	MAC	16inch	832 × 624	RGB	Progressive	57.285	49.724	1152	320	32	64	224	832
22	SPECIAL	1024×576@60Hz	1024 × 576	RGB	Progressive	48.375	36.427	1328	304	48	128	128	1024
23	VESA	1024×768@60Hz	1024 × 768	RGB	Progressive	65.000	48.363	1344	320	24	136	160	1024
24	VESA	1024×768@70Hz		RGB	Progressive	75.000	56.476	1328	304	24	136	144	1024
25	VESA	1024×768@75Hz		RGB	Progressive	78.750	60.023	1312	288	16	96	176	1024
26	VESA	1024×768@85Hz		RGB	Progressive	94.500	68.677	1376	352	48	96	208	1024
27	VESA	1360×768@60Hz	1360 × 768	RGB	Progressive	85.500	47.712	1792	432	64	112	256	1360
28	VESA	1152×864@75Hz	1152 × 864	RGB	Progressive	108.000	67.500	1600	448	64	128	256	1152
29	MAC	21inch	1152 × 870	RGB	Progressive	100.000	68.681	1456	304	32	128	144	1152
30	VESA	1280×960@60Hz	1280 × 960	RGB	Progressive	108.000	60.000	1800	520	96	112	312	1280
31	VESA	1280×960@85Hz		RGB	Progressive	148.500	85.938	1728	448	64	160	224	1280
32	VESA	1280×1024@60Hz	1280 × 1024	RGB	Progressive	108.500	63.981	1688	408	48	112	248	1280
33	SUN	1280×1024@67Hz		RGB	Progressive	117.000	71.691	1632	352	16	112	224	1280
34	VESA	1280×1024@75Hz		RGB	Progressive	135.000	79.976	1688	408	16	144	248	1280
35	SUN	1280×1024@76Hz		RGB	Progressive	135.000	81.130	1664	384	32	64	288	1280
36	VESA	1280×1024@85Hz		RGB	Progressive	157.500	91.146	1728	448	64	160	224	1280
37	VESA	1600×1200@60Hz	1600 × 1200	RGB	Progressive	162.000	75.000	2160	560	64	192	304	1600
38	VESA	1280×768@60Hz	1280 × 768	RGB	Progressive	79.500	47.776	1664	384	64	128	192	1280
39	VESA	1280×768@60Hz Reduced Blanking	1280 × 768	RGB	Progressive	68.250	47.396	1440	160	48	32	80	1280
40	VESA	1600×1200@60Hz Reduced Blanking	1600 × 1200	RGB	Progressive	130.250	74.006	1760	160	48	32	80	1600
41	PFM	852×480 @60	852 × 480	RGB	Progressive	33.740	31.469	1072	220	322	124	64	852
42	PFM	1024×1024 @60	1024 × 1024	RGB	Progressive	85.050	67.500	1260	236	40	60	136	1024
43	PFM	1280×768 @56	1280 × 768	RGB	Progressive	77.040	45.000	1712	432	80	92	260	1280

Vertical (lines)							SYNC		Clamp		Format Flag				Default Data		
V. FREQ [Hz]	V. TOTAL	V. BLK	V. ACTIV	V. SYNC	V. FP	V. BP	INT(G) or CS	EXT(H/V)/ POLARITY	Position	Width	Frame Lock	PLL Enable	Interface	IP Converter	Pic Mode	COLOR MATRIX	ZOOM MODE
70.086	449	99	350	2	37	60	NO	YES P/N	62	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
85.080	445	95	350	3	32	60	NO	YES P/N	36	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
85.080	445	45	400	3	1	41	NO	YES N/P	36	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
59.940	525	45	480	2	10	33	NO	YES N/N	60	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
66.667	525	45	480	3	3	39	NO	YES N/N	39	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
72.809	520	40	480	3	9	28	NO	YES N/N	29	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
75.000	500	20	480	3	1	16	NO	YES N/N	41	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
85.008	509	29	480	3	1	25	NO	YES N/N	24	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
70.087	449	49	400	2	12	35	NO	YES N/P	61	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
85.039	446	46	400	3	1	42	NO	YES N/P	37	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
60.000	529	49	480	3	12	34	YES	NO	60	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
60.000	504	24	480	3	1	20	NO	YES N/N	56	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
59.637	504	24	480	3	1	20	NO	YES N/N	37	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
60.115	500	20	480	8	1	11	NO	YES N/N	37	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
56.250	625	25	600	2	1	22	NO	YES P/P	39	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
60.317	628	28	600	4	1	23	NO	YES P/P	53	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
72.188	666	66	600	6	37	23	NO	YES P/P	35	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
75.000	625	25	600	3	1	21	NO	YES P/P	32	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
85.061	631	31	600	3	1	27	NO	YES P/P	21	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
60.000	517	37	480	8	6	23	NO	YES P/P	66	8	OFF	ON	OFF	OFF	STANDARD	293M	FULL
74.550	667	43	624	3	3	37	NO	YES N/N	27	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
60.210	605	29	576	3	1	25	YES	NO	47	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
60.004	806	38	768	6	3	29	NO	YES N/N	36	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
70.069	806	38	768	6	3	29	NO	YES N/N	29	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
75.029	800	32	768	3	1	28	NO	YES P/P	20	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
84.997	808	40	768	3	1	36	NO	YES P/P	17	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
60.015	795	27	768	6	3	18	NO	YES P/P	25	8	OFF	ON	OFF	OFF	STANDARD	293M	FULL
75.000	900	36	864	3	1	32	NO	YES P/P	21	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
75.061	915	45	870	3	3	39	NO	YES N/N	17	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
60.000	1000	40	960	3	1	36	NO	YES P/P	21	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
85.002	1011	51	960	3	1	47	NO	YES P/P	15	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
60.020	1066	42	1024	3	1	38	NO	YES P/P	19	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
67.189	1067	43	1024	8	2	33	NO	YES N/N	15	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
75.025	1066	42	1024	3	1	38	NO	YES P/P	16	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
76.107	1066	42	1024	8	2	32	NO	YES N/N	7	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
85.024	1072	48	1024	3	1	44	NO	YES P/P	13	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
60.000	1250	50	1200	3	1	46	NO	YES P/P	18	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
59.870	798	30	768	7	3	20	NO	YES N/P	30	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
59.995	790	22	768	7	3	12	NO	YES P/P	6	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
59.924	1235	35	1200	4	3	28	NO	YES P/P	0	8	OFF	ON	OFF	OFF	STANDARD	293M	NORMAL
60.000	525	45	10	2	33	480	NO	YES P/N	59	8	OFF	ON	OFF	OFF	STANDARD	293M	FULL
60.000	1125	101	48	5	48	1024	NO	YES P/N	8	8	OFF	ON	OFF	OFF	STANDARD	293M	FULL
56.000	804	36	3	7	26	768	NO	YES P/N	26	8	OFF	ON	OFF	OFF	STANDARD	293M	FULL

Table 2. Factory Preset Data

	Format	Name	Resolution	Signal	Scanning	Clock	Horizontal (dot)						
			H(dot) × V(line)	Type	Format	[MHz]	H-FREQ [kHz]	H. TOTAL	H. BLK	H. FP	H. SYNC	H. BP	H. ACTIV
44	VIDEO	525_60	720 × 483	YUV	Interlace	28.322	15.734	968	218	135	32	51	750
45	VIDEO	625_50	720 × 575	YUV	Interlace	28.125	15.625	1000	250	113	32	105	750
46	DTV	575/50p		YUV/RGB	Progressive	27.000	31.250	1000	250	54	60	136	750
47	DTV	480/60p	720 × 483	YUV/RGB	Progressive	27.000	31.469	968	218	55	63	100	750
48	DTV	1080/24psf	1920 × 1080	YUV/RGB	Interlace	74.250	27.000	2750	930	662	44	224	1820
49	DTV	1080/50i		YUV/RGB	Interlace	74.250	28.125	2640	820	552	44	224	1820
50	DTV	1080/60i		YUV/RGB	Interlace	74.250	33.750	2200	380	112	44	224	1820
51	DTV	1035/60i	1920 × 1035	YUV/RGB	Interlace	74.250	33.750	2200	300	66	44	190	1900
52	DTV	720/60p	1280 × 720	YUV/RGB	Progressive	74.250	45.000	1650	434	117	40	277	1216
53	SDTV	NTSC_TV	720 × 483	YUV	Interlace	28.322	15.734	968	218	132	32	54	750
54	SDTV	NTSC_ COMPOSITE		YUV	Interlace	28.322	15.734	968	218	132	32	54	750
55	SDTV	PAL_ COMPOSITE	720 × 575	YUV	Interlace	28.125	15.625	1000	250	113	32	105	750
56	SDTV	SECAM_ COMPOSITE		YUV	Interlace	28.125	15.625	1000	250	113	32	105	750
57	SDTV	443NT_ COMPOSITE	720 × 483	YUV	Interlace	28.322	15.734	968	218	132	32	54	750
58	SDTV	PAL-M_ COMPOSITE	720 × 575	YUV	Interlace	28.125	15.734	968	218	132	32	54	750
59	SDTV	PAL-N_ COMPOSITE		YUV	Interlace	28.125	15.625	1000	250	113	32	105	750
60	SDTV	BW_ COMPOSITE60	720 × 483	YUV	Interlace	28.322	15.734	968	218	132	32	54	750
61	SDTV	BW_ COMPOSITE50		YUV	Interlace	28.322	15.625	1000	250	113	32	105	750
62	SDTV	NTSC_YC		YUV	Interlace	28.322	15.734	968	218	132	32	54	750
63	SDTV	PAL_YC	720 × 575	YUV	Interlace	28.125	15.625	1000	250	113	32	105	750
64	SDTV	SECAM_YC		YUV	Interlace	28.125	15.625	1000	250	113	32	105	750
65	SDTV	443NT_YC	720 × 483	YUV	Interlace	28.322	15.734	968	218	132	32	54	750
66	SDTV	PAL-M_YC	720 × 575	YUV	Interlace	28.125	15.734	968	218	132	32	54	750
67	SDTV	PAL-N_YC		YUV	Interlace	28.125	15.625	1000	250	113	32	105	750
68	SDTV	BW_YC60	720 × 483	YUV	Interlace	28.322	15.734	968	218	132	32	54	750
69	SDTV	BW_YC50		YUV	Interlace	28.322	15.625	1000	250	113	32	105	750
70	SDTV	PAL60		YUV	Interlace	28.322	15.734	968	218	132	32	54	750
71		OTHERS	640 × 480	RGB	Progressive	25.175	31.469	800	160	16	96	48	640
72		NO_SYNC		RGB	Progressive	25.175	31.469	800	160	16	96	48	640

Vertical (lines)							SYNC		Clamp		Format Flag				Default Data		
V. FREQ [Hz]	V. TOTAL	V. BLK	V. ACTIV	V. SYNC	V. FP	V. BP	INT(G) or CS	EXT(H/V)/ POLARITY	Position	Width	Frame Lock	PLL Enable	Interface	IP Converter	Pic Mode	COLOR MATRIX	ZOOM MODE
60.000	525	71	22	2	47	454	SOG	NO	96	39	ON	OFF	ON	ON	STANDARD	293M	NORMAL
50.000	625	91	27	2	62	534	SOG	NO	96	39	ON	OFF	ON	ON	STANDARD	293M	NORMAL
50.000	625	91	26	3	62	534	SOG	NO	42	12	ON	OFF	OFF	OFF	STANDARD	293M	NORMAL
60.000	525	71	22	6	43	454	SOG	NO	38	12	ON	OFF	OFF	OFF	STANDARD	293M	NORMAL
48.000	1125	101	34	10	57	1024	SOG	NO	19	12	ON	OFF	ON	OFF	STANDARD	274M	FULL
50.000	1125	101	34	10	57	1024	SOG	NO	19	12	ON	OFF	ON	OFF	STANDARD	274M	FULL
60.000	1125	101	34	10	57	1024	SOG	NO	19	12	ON	OFF	ON	OFF	STANDARD	274M	FULL
60.000	1125	101	14	10	77	1024	SOG	NO	18	12	ON	OFF	ON	OFF	STANDARD	274M	FULL
60.000	750	66	23	5	38	684	SOG	NO	22	12	ON	OFF	OFF	OFF	STANDARD	274M	FULL
59.940	525	71	24	2	45	454	SOG	NO	30	58	ON	OFF	ON	ON	STANDARD	293M	NORMAL
59.940	525	71	24	2	45	454	SOG	NO	30	58	ON	OFF	ON	ON	STANDARD	293M	NORMAL
50.000	625	91	27	2	62	534	SOG	NO	30	58	ON	OFF	ON	ON	STANDARD	293M	NORMAL
50.000	625	91	27	2	62	534	SOG	NO	30	58	ON	OFF	ON	ON	STANDARD	293M	NORMAL
60.000	525	71	24	2	45	454	SOG	NO	30	58	ON	OFF	ON	ON	STANDARD	293M	NORMAL
60.000	525	71	24	2	45	454	SOG	NO	30	58	ON	OFF	ON	ON	STANDARD	293M	NORMAL
50.000	625	91	27	2	62	534	SOG	NO	30	58	ON	OFF	ON	ON	STANDARD	293M	NORMAL
60.000	525	71	24	2	45	454	SOG	NO	30	58	ON	OFF	ON	ON	STANDARD	293M	NORMAL
50.000	625	91	27	2	62	534	SOG	NO	30	58	ON	OFF	ON	ON	STANDARD	293M	NORMAL
59.940	525	71	24	2	45	454	SOG	NO	30	58	ON	OFF	ON	ON	STANDARD	293M	NORMAL
50.000	625	91	27	2	62	534	SOG	NO	30	58	ON	OFF	ON	ON	STANDARD	293M	NORMAL
50.000	625	91	27	2	62	534	SOG	NO	30	58	ON	OFF	ON	ON	STANDARD	293M	NORMAL
60.000	525	71	24	2	45	454	SOG	NO	30	58	ON	OFF	ON	ON	STANDARD	293M	NORMAL
60.000	525	71	24	2	45	454	SOG	NO	30	58	ON	OFF	ON	ON	STANDARD	293M	NORMAL
50.000	625	91	27	2	62	534	SOG	NO	30	58	ON	OFF	ON	ON	STANDARD	293M	NORMAL
60.000	525	71	24	2	45	454	SOG	NO	30	58	ON	OFF	ON	ON	STANDARD	293M	NORMAL
50.000	625	91	27	2	62	534	SOG	NO	30	58	ON	OFF	ON	ON	STANDARD	293M	NORMAL
59.940	525	71	24	2	45	454	SOG	NO	30	58	ON	OFF	ON	ON	STANDARD	293M	NORMAL
59.940	525	45	10	2	33	480	NO	YES N/N	30	58	OFF	OFF	OFF	OFF	STANDARD	293M	NORMAL
59.940	525	45	10	2	33	480	NO	YES N/N	64	16	OFF	OFF	OFF	OFF	STANDARD	293M	NORMAL

2-3. White Balance Adjustment

1. Enter the Service Mode as follows. Generate the built-in adjustment signal.
   Select [Service Mode] → [White Balance] → [Window], and select [Large].
2. Set the color temperature to [High] as follows.
   Select [Color Temp.] → [High].
3. Adjust white balance using the R, G and B gain adjustments as follows.
   Adjust white balance by adjusting [Red Gain], [Green Gain] and [Blue Gain] until color temperature satisfies the specification of 9300 K. During this adjustment, set [Blue Gain] to 255 normally.
4. Set the color temperature to [Mid] as follows.
   Select [Color Temp.] → [Mid].
5. Adjust white balance using the R, G and B gain adjustments as follows.
   Adjust white balance by adjusting [Red Gain], [Green Gain] and [Blue Gain] until color temperature satisfies the specification of 6500 K. During this adjustment, set [Red Gain] to 255 normally.
6. Set the color temperature to [Low] as follows.
   Select [Color Temp.] → [Low].
7. Adjust white balance using the R, G and B gain adjustments as follows.
   Adjust white balance by adjusting [Red Gain], [Green Gain] and [Blue Gain] until color temperature satisfies the specification of 3200 K. During this adjustment, set [Red Gain] to 255 normally.

W/B setting value

1) High 9300 K
   x = 0.283 y = 0.298
2) Mid 6500 K
   x = 0.313 y = 0.329
3) Low 3200 K
   x = 0.423 y = 0.399

2-4. AD Calibration Adjustment

1. Adjustment Preparation

1) Set the [RGB Mode] of the Custom Setup menu to [PC].
2) Set [Cal Mode] of [AD Converter] of the Service Mode menu to [On].

2. AD Adjustment of RGB Input

1) Input the RGB signal VGA (640 × 480 /60) all white 90 IRE to INPUT1.
2) Adjust the [Sub Cont RGB] of the [RGB Calibration] until the G detection value becames the setup value. (Setup value = 220 ±3)
3) Adjust the [Red Gain] and [Blue Gain] until the R and B detection values become the G detection value.
4) Set the RGB signal to the VGA (640 × 480 /60) all gray 20 IRE.
5) Adjust [Red Bias], [Green Bias] and [Blue Bias] until the R, B and G detection values become the setup value. (Setup value = 48 ±2)
6) Repeat the above steps 1) to 5) until all the adjustment values are satisfied at the same time.

3. AD Adjustment of Component Input

1) Set INPUT1 to the Component input.
2) Input the component signal 1080/60i all white 90 IRE to INPUT1.
3) Adjust [Sub Cont YUV] of [YUV Calibration] until the G detection value becomes the setup value. (Setup value = 220 ±3)
4) Set the component signal to the 1080/60i all gray 20 IRE.
5) Adjust [Sub Brt YUV] until the G detection value becomes the setup value. (Setup value = 48 ±2)
6) Adjust [Cb Offset YUV] until the B detection value agrees with the G detection value.
7) Adjust [Cr Offset YUV] until the R detection value agrees with the G detection value.
8) Repeat the above steps 5) to 7) until all adjustment values are set to the setup value of step 5).
9) Repeat the above steps 2) to 8) until all adjustment values are set to the setup values of steps 3) and 5).

4. AD Adjustment of Video Input (When the Video Input connector is installed)

1) Set the INPUT to the Video input.
2) Set the video signal to the NTSC all white 90 IRE.
3) Adjust [Sub Cont Video] of [Video Calibration] until the G detection value becomes the setup value. (Setup value = 220 ±3)
4) Set the video signal to the NTSC all gray 20 IRE.
5) Adjust [Sub Brt Video] until the G detection value becomes the setup value. (Setup value = 48 ±2)

6) Adjust [Cb Offset Video] until the B detection value agrees with the G detection value.
7) Adjust [Cr Offset Video] until the R detection value agrees with the G detection value.
8) Repeat the above steps 5) to 7) until all adjustment values are set to the setup value of step 5).
9) Repeat the above steps 2) to 8) until all adjustment values are set to the setup values of steps 3) and 5).

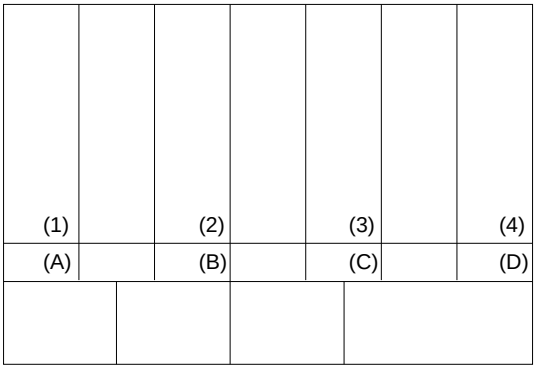
5. Set [Cal Mode] to [Off].

Note

The above described adjustment items 2, 3 and 4 must be performed while the picture quality mode User1 is in the standard condition.

2-5. Sub Color and Sub Hue Adjustments

1. Connect the NTSC SMPTE color bar signal to Video Input.



SMPTE color bars

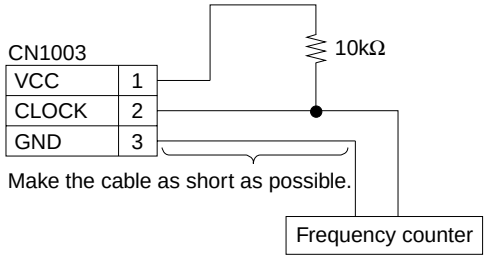
2. Set the picture quality setting User1 in the standard condition as follows.
   Select [Picture Mode] → [User1]. Then set [Reset] of [Adjust Picture] to [OK].
3. Enter the Service Mode and then select the Blue Only mode as follows.
   Select [Service Mode] → [General] → [Blue Only], and set [1].
4. While observing the screen display, adjust the NTSC Sub Color and Sub Hue as follows.
   Select [Service Mode] → [Chroma Decoder] → [Sub Color], and set [Col (NTSC)] to [6].
   Adjust [C Out Level] of [Chroma Decoder] until (1) has the same brightness as (A), and (4) has the same brightness as (D).
   Select [Hue] of [Chroma Decoder] and adjust [Hue (NTSC)] until (2) has the same brightness as (B), and (3) has the same brightness as (C).
   Repeat the above described adjustments until all the adjustment values are satisfied at the same time. (Tracking)
5. Input the PAL SMPTE color bar signal to Video Input.
6. While observing the screen display, adjust the PAL Sub Color as follows.
   Select [Service Mode] → [Chroma Decoder] → [Sub Color].
   Adjust [Col (PAL)] of [Chroma Decoder] until (1) has the same brightness as (A), and (4) has the same brightness as (D).
7. Input the SECAM SMPTE color bar signal to Video Input.
8. While observing the screen display, adjust the SECAM Sub Color as follows.
   Select [Service Mode] → [Chroma Decoder] → [Sub Color].
   Adjust [Col (SECAM)] of [Chroma Decoder] until (1) has the same brightness as (A), and (4) has the same brightness as (D).

2-6. Video Decoder Adjustment

1. Connect the SECAM all gray 30 IRE signal to Video Input.
2. Set [Cal Mode] of [AD Converter] of the Service Mode menu to [On].
3. Adjust [By Adj (SECAM)] of [Chroma Decoder] of the Service Mode menu until the Blue detection value has the same value as the Green value.
4. Adjust [Ry Adj (SECAM)] of [Chroma Decoder] of the Service Mode menu until the Red detection value has the same value as the Green value.
5. Repeat steps 3 and 4 until the detection values of R, G and B are within the range (±2) of tolerance error.
6. Set [Cal Mode] of [AD Converter] of the Service Mode menu to [Off].

2-7. Watch Error Adjustment

1. Select [32k Clock Out] in [General] of the Service Mode menu and set it to [On].
2. Connect a frequency counter as shown below and measure the frequency.

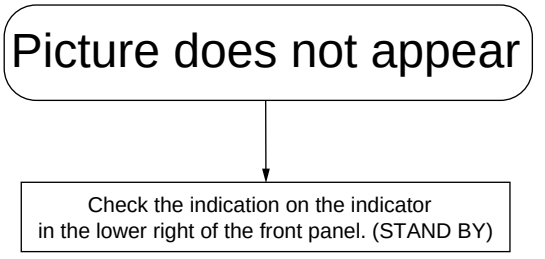


3. Select [Watch Error] in [General] of the Service Mode menu and enter the measurement result.
4. Set [32k Clock Out] to [Off].

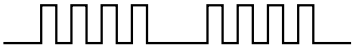
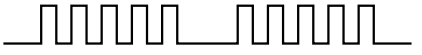
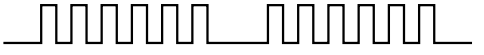
Section 3
Troubleshooting

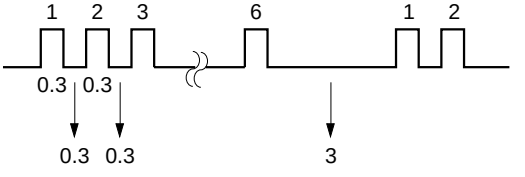
3-1. Judging Method When Image Does Not Appear

1. Flow chart



STBY LED flashes

	2 times	When error code is detected from the panel.
	3 times	When temperature increase of the power supply block or temperature increase inside the unit due to the sensor board is detected.
	4 times	When a fan stop or failure of the fan drive circuit is detected.
	5 times	When 3.3 V digital system power voltage decreases (1.6 V or less) or becomes excess voltage (4 V or more), and 5 V digital system power voltage decreases (2.5 V or less or becomes excess voltage (6 V or more)
	6 times	When 6 V analog system power voltage decreases (3 V or less) or becomes excess voltage (7.2 V or more)



When the STBY LED does not flash, the power supply circuit is defective.

2. How to find PDP unit trouble

1) The power voltage for the PDP is supplied correctly.
   The power voltages are supplied from each connector on the switching regulator board to the panel.
   - CN8, 9: 6.5 V, 16.5 V, 220 V
   - CN12: 6.5 V, 61 V
   - CN11: 3.3 V, 6.5 V
   - CN10: 12 V

2) The input signal is supplied to the PDP panel correctly.
   The LVDS signal is supplied to CN01 of the circuit board in the center of the PDP panel correctly.

   If no image appears when the above conditions are satisfied, the PDP unit is considered defective.

3-2. Self Diagnosis Function

3-2-1. Overview

The self-diagnosis function of this model detects abnormality by checking the power voltages, detecting temperature, detecting operation of fans and by checking EEPROM register and the watch timer using the A/D converter. When any abnormality is detected, the self-diagnosis function displays the abnormality by flashing the Standby indicator and displays the detected data on the service menu.
If the abnormal condition exceeds the allowable limit, it forcibly activates the shutdown operation.

The self-diagnosis function detects the following items.

1. Detecting stoppage of fans and shutting it down, and detecting failure of the fan drive circuit
2. Detecting temperature increase of the power supply block and shutting it down
3. Detecting temperature at the sensor board
4. Detecting the communication error with each device
5. Detecting the EEPROM error
6. Detecting decrease of the watch backup power voltage and detecting abnormal oscillation
7. Detecting chroma decoder initialization error
8. Detecting abnormal voltage of the internal power supply and shutting power supply down
9. Detecting abnormal power-off sequence

If any abnormality is detected, the Standby indicator flashes at the interval of 0.4 seconds continuously.
At the same time, the corresponding item shows the NG indication in the service menu.
The NG indication is not reset and is accumulated unless the AC cord is disconnected.
If the abnormal condition exceeds the allowable limit, it forcibly activates the shutdown operation and picture will not be displayed any more.
At this time, the Standby indicator flashes to indicate that the PDP unit is in the error mode as shown in Section 3-1.

3-2-2. Abnormality Judgment Criterion

1. Detecting stoppage of fans and shutting it down, and detecting failure of the fan drive circuit

```
Service Mode
Service Status
    Fan & Temp Status
    Fan Drive   :   OK  --- (1)
    Fan         :   OK  --- (2)
    P/S Temp    :   OK

    P/S Temp    :   44[°C]
    NO ACK DEV  :   0004
```

(1) Fan Drive: When the fan drive circuit is in normal operation, “OK” is displayed.
(2) Fan: When all the four built-in fans are in normal operation, “OK” is displayed.
If the fan drive circuit is defective or if any of the built-in fans stops its rotation, the shutting down is activated.

2. Detecting temperature increase of the power supply block and shutting it down

```
Service Mode
Service Status
    Fan & Temp Status
    Fan Drive   :   OK
    Fan         :   OK
    P/S Temp    :   OK  ---(1)

    P/S Temp    :   44[°C]
    NO ACK DEV  :   0004
```

(1) P/S Temp: If temperature inside the power supply block exceeds 66˚C, “NG” is displayed and the Standby indicator flashes at the interval of 0.4 seconds continuously. If temperature exceeds 71˚C, the shutting down is activated.

3. Detecting temperature at the sensor board

```
Service Mode
General
    Fan Status
    Fan Control     : Manual
    Ref Voltage     :  8.0[V]
    F/B Voltage     :  8.0[V]
    Drive Data         2B5F
    P/S Temp        :  43[°C]
    Temp1           :  43[°C] --- (1)
    Temp2           :  43[°C] --- (2)
    Temp3           :  43[°C] --- (3)
```

(1) Temp1 : The temperature measured by the S board installed in the top of the Q block assembly is displayed.

(2) Temp2 : The temperature measured by the S board installed in the top of the power supply board is displayed.

(3) Temp3 : The temperature measured by the S board installed in the vicinity of the upper left side of the panel is displayed.

If any of Temp 1, 2 or 3 value exceeds 66˚C, the Standby indicator flashes at the interval of 0.4 seconds continuously. If temperature exceeds 71˚C, the shutting-down is activated.

4. Detecting the communication error with each device

```
Service Mode
Service Status
    Fan & Temp Status
    Fan Drive       :  OK
    Fan             :  OK
    P/S Temp        :  OK

    P/S Temp        :  44[°C]
    NO ACK DEV      :  0004 --- (1)
```

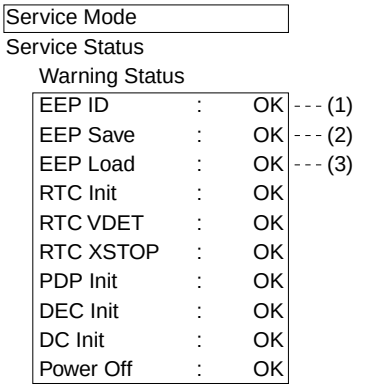
(1) NO ACK DEV : It indicates if the communication with the respective devices controlled by the I^2C bus is correctly established or not.

Bit 0 : Audio Processor Each bit : 0 : OK 1 : NG
Bit 1 : Audio Switch
Bit 2 : AV Switch
Bit 3 : Closed Caption Decoder
Bit 4 : 3D Combfilter
Bit 5 : Chroma Decoder
Bit 6 : PDP (No Use for PFM-50C1/E)
Bit 7 : Tuner (No Use for PFM)
Bit 8 : Auto Wide Decoder
Bit 9 : AD Converter
Bit 10 : EEPROM
Bit 11 : IP Converter (System IC)
Bit 12 : OSD (No Use for PFM)
Bit 13 : PLD (No Use for PFM)
Bit 14 : RTC (No Use for PFM)
Bit 15 : Scan Converter (No Use for PFM)

Note

This model does not have the AV switch, therefore bit 2 always goes to 1 (high).
This function detects the device containing error. It does not activate displaying the warning nor shutting-down operation.

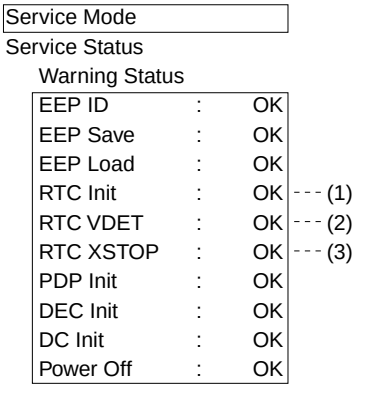
5. Detecting the EEPROM error


Service Mode
Service Status
Warning Status
EEP ID : OK --- (1)
EEP Save : OK --- (2)
EEP Load : OK --- (3)
RTC Init : OK
RTC VDET : OK
RTC XSTOP : OK
PDP Init : OK
DEC Init : OK
DC Init : OK
Power Off : OK

If communication with EEPROM is not established correctly, “NG” is displayed on the corresponding item.

(1) EEP ID : ID CODE error
(2) EEP Save : Data write error
(3) EEP Load : Data read error

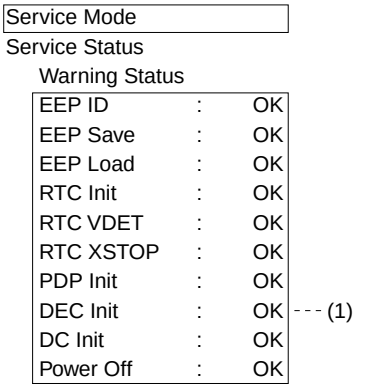
6. Detecting decrease of the watch backup power voltage and detecting abnormal oscillation


Service Mode
Service Status
Warning Status
EEP ID : OK
EEP Save : OK
EEP Load : OK
RTC Init : OK --- (1)
RTC VDET : OK --- (2)
RTC XSTOP : OK --- (3)
PDP Init : OK
DEC Init : OK
DC Init : OK
Power Off : OK

If the watch IC does not work correctly, “NG” is displayed on the corresponding item.

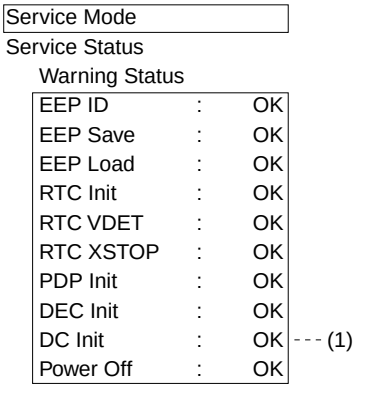
(1) RTC Init : Watch initialization error
(2) FTC VDET : Watch power voltage error (1.8 V or less)
(3) RTC XSTOP : Watch oscillator error

7. Detecting chroma decoder initialization error



(1) DEC Init : In the case of the chroma decoder unit initialization error, “NG” is displayed.

8. Detecting abnormal voltage of the internal power supply and shutting power supply down



(1) DC Init : When the internal power supply (digital system 5 V, digital system 3.3 V or analog system 6 V) does not start up, “NG” is displayed.
If any one of these power supplies does not start up, the shutting-down operation is activated and this indication is stored in log after the PDP unit returns to the normal operation.

9. Detecting abnormal power-off sequence

Service Mode

Service Status

Warning Status

EEP ID	:	OK
EEP Save	:	OK
EEP Load	:	OK
RTC Init	:	OK
RTC VDET	:	OK
RTC XSTOP	:	OK
PDP Init	:	OK
DEC Init	:	OK
DC Init	:	OK
Power Off	:	OK --- (1)

(1) Power Off : If the power-off sequence is not performed correctly, “NG” is displayed. Failure of the power supply block or the PDP is suspected.

Section 4
Circuit Description

4-1. Outline

The main functions of each board are as follows.

Q board
Input terminal and selector of video/sound system, preamplifier of sound system, power amplifier of sound system and fan control, etc.

B board
Signal processing of video system such as color decoder, sync separation, A/D converter, IP conversion, scan converter, PDP panel interface and OSD composition.

S board
Temperature sensor to detect the temperature inside the unit.

H1 board
Two-color LED driver and SIRCS photoreceptor.

H2 board
User interface having the five keys, “MENU”, “UP”, “DOWN”, “ENTER” and “POWER”.

4-2. Q Board

The Q board has the three input channels for the video and sound signals, two HD15 connectors (J3001 and J3002) to input RGB/YUV signals and one connector (CN3000) to input the signal by connecting with the optional board.

The video signals input from the INPUT2 connector and optional board are switched by VIDEO SW (IC3003). The output signal switched by VIDEO SW (IC3003) and the input video signal from the INPUT1 connector are switched by VIDEO SW (IC3004). The selection of with/without LPF for the switched signals is performed by VIDEO SW (IC3006), then the signals are output to the B board from CN3001. The H/V SYNC signal at the time of RGB signal input is input to Selector (IC3005). In the same way, the selected SYNC signal is output from CN3001. These SW controls are performed by the port control from the microcomputer.

The sound signals input from the two mini-jack connectors (J3003 and J3004) placed beside the HD15 connector and from the connector connected to the optional board are input to AUDIO SW (IC3022). It is controlled by IIC from the microcomputer and switched to the specified sound. Then, the switched sound is input to Surround Processor (IC3012). In the Surround Processor, various controls of VOL, BALANCE, BASS and TREBLE, and processing of “Hall” and “Simulation” in the surround mode are performed. The L and R signals from the preamplifier are input to the D class power amplifier (IC3014, IC3015) respectively. In this amplifier, each input signal is PWM modulated into square wave of about one hundred and several tens KHz and then output. The output signal is integrated through LPF that is constituted by L and C, and it drives the speaker as an analog waveform.

4-3. B Board

The B board has the main two input channels, Composite/ Y/C for the color system signals such as NTSC/PAL/ SECAM and YUV/RGB for the DTV and PC signals.
The Composite/Y/C signal input from the optional board is decoded to the YUV signal by Color Decoder (IC2). At that time, when the Composite signal is NTSC, it is Y/C separated by 3D-Comb Filter (IC206) and when the Composite signal is PAL, SECAM, etc., it is Y/C separated by 3Line-Comb Filter (IC205). Each output is selected by Selector (IC208, IC209) and then returned to Color Decoder (IC2), decoded to YUV signal and output to AD converter (IC403). In the case that it is compliant with Closed Caption, the RGB signal from Closed Caption Decoder (IC4) is added and output.

The AD converter (IC403) has the two input channels and it is provided with a built-in broad band video switch. The YUV signal passed through the color decoder is input to INPUT 1 (#124/133/13 pins) and RGB/YUV signal is directly input to INPUT 2 (#126/136/141 pins). The built-in video switch has the amplifier that is capable of adjusting the gain and bias. By adjusting the gain and bias of this amplifier, the AD calibration is performed to adjust the digital data of three colors. The video signal is AD converted after passing through the amplifier, and then all three channels are converted into a total of 48 bit digital data of dual-phase output.
This AD converter has a built-in PLL. When HD of the video signal is input, CLK is generated by this built-in PLL. 1/2CLK (#101 pin) is output to System IC because the digital data is dual-phase.

The signal converted into the digital data by the AD converter is input to System IC (IC601) in which the interlace signal of 15 KHz is IP converted into progressive of 31.5 KHz. The signal processed by YUV is controlled in color, hue, chroma transient improvement, sharpness, brightness, contrast, etc., and it is converted into the RGB signal by the built-in OUTPUT Matrix and output. This Matrix is 3 × 3, that is, nine registers in total. The Hue control, Color control, etc. are enabled by calculating and changing the values using microcomputer. As for the RGB input, it is output as it is.

In the Scan Converter (IC801), the resolution is converted according to the PDP panel resolution. In this unit, the progressive signal of 1280 × 768 is output. Also, wide and zoom function settings can be performed as required. The input signal is input in digital dual-phase (48 bit), however, it is output to PLD (IC7102) in single-phase (24 bit).

PLD (IC7102) performs White Balance adjustment, error diffusion, Blue Only function, test signal generation and gamma curve correction besides superimposing of the OSD signal from OSD IC (IC1205). The signal input in digital single-phase (24 bit) is converted into digital dual-phase (48 bit) and output. Also the port control for the output control of panel is performed by PLD (IC7102).

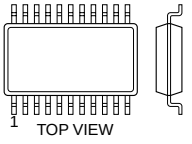
The digital dual-phase (48 bit) signal after being controlled is input to LVDS Transmitter (IC7001) and formatted, and then it is LVDS transferred to the PDP panel.

4-4. S Board

The voltage detected from the temperature sensor IC (IC1501) is changed to linear with respect to the ambient temperature. Then, it is amplified by OP-AMP and connected to the B board.

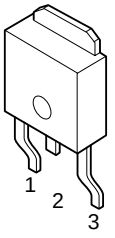
Section 5
Semiconductors

BA033F-E2
BA033FP-E2
BR24C21F-E2
CXA1211M-T4
LM1881M
LM1881MX
M24C64-WMN6T(B)
NJM2903M
NJM2903M-TE2
NJM4558E(TE2)
SI-3025LSA-TL
SN74CBTD3306PWR-12
TC4W53FU(TE12R)
TC7W126FU(TE12R)
TC7W14FU(TE12R)
TC7W241FU-TE12R
UPC358G2-E2

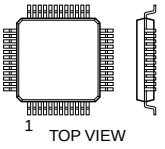


8pin SOP

BA05FP-E2
BA12FP-E2

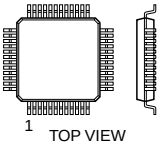


CXA2163AQ-T6



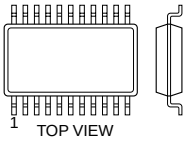
48pin QFP

CXA3516R



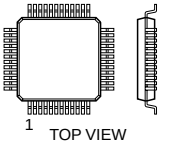
144pin QFP

CXD2057M-T6
MB90098APF-A-130-BND-ER
TEA6422DT



28pin SOP

CXD9606Q



208pin QFP

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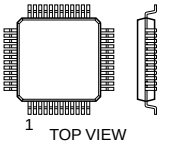

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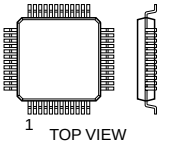
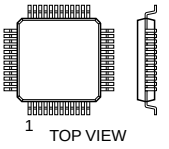
HD64F2633TE



120pin QFP

IP00C713



256pin QFP

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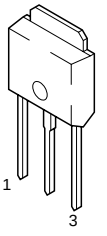
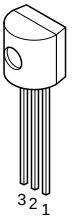


LM35DZ



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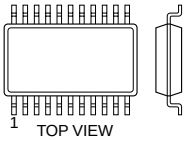
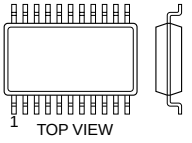
TC74VHCT541AFT(EL)



20pin SOP

M52758FP



36pin SOP

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MAX202CSE-T
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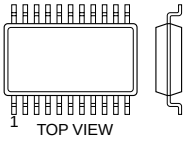
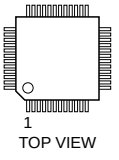
SN74LV4053APWR
TC74HC123AF
TC74HC123AF(EL)
TC74HC4052AF(EL)



16pin SOP

MC141627FT



48pin QFP

MM74HC32MTCX
SN74HC32APWR
SN74LV123APWR
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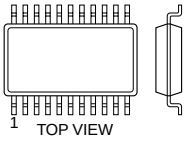
TC74HC125AF(EL)
TC74VHC86FT
TC74VHCT14AFT(EL)
TK15452V



14pin SSOP

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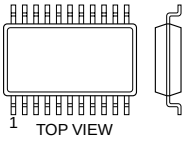

50pin SOP

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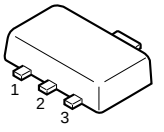

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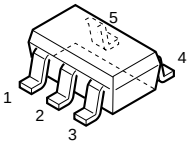
PST9229NL



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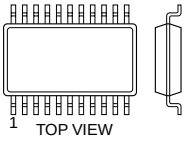
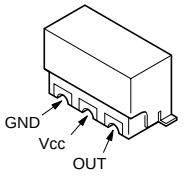


10pin SOP

RS-50-T



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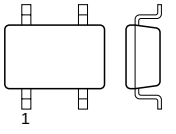

4pin CHIP

SC7S04F
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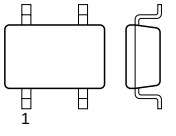
TC7S08FU(TE85R)



5pin CHIP

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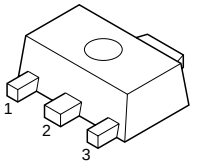
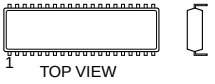


TA8776N



30pin DIP

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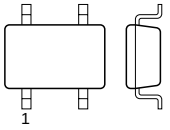
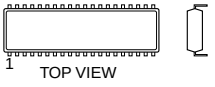


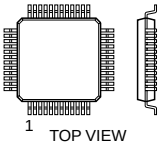
8pin CHIP

TDA7480



20pin DIP

XC18V02-VQ44C1



44pin QFP

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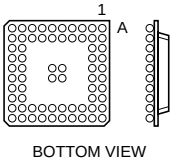

208pin FQFP

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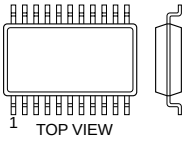

18pin SOP

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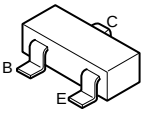
2SA1462-T1Y33Y34
2SA1774R
2SA1774TL-QR
2SB709A-QRS-TX
2SC1623-L5L6
2SC2412K-T-146-QR
2SC4617R
2SC4617TL-QR



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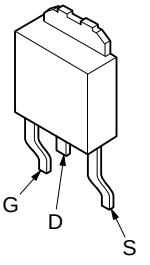
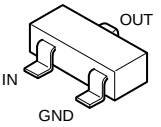
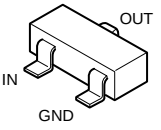


DTA144EE
DTA144EE-TL
DTC144EE
DTC144EE-TL



DTC114EU
DTC114EUA-T106



1SS387-TPL3
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MA2S111-(K8)
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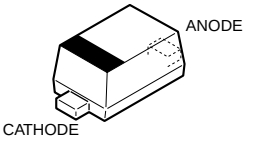
UDZS-TE1712B
UDZS-TE17-33B
UDZSTE-174.7B



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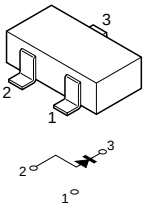

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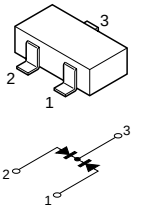

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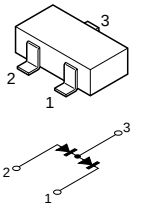
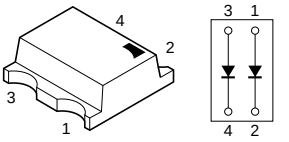
1SS226
MA157-TX



BRPG1211C-34-TR



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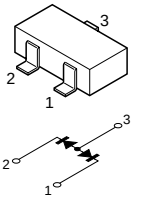
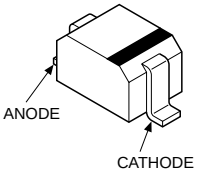
MA3130WA-TX



DTZ10B
MA111-TX
MA113-(TX)
RD5.6SB-T1



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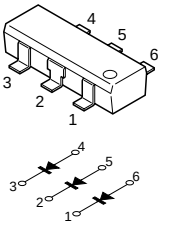
HN1D03FU-TE85R



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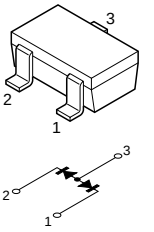
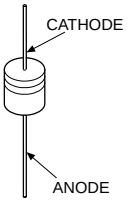


MTZJ4.7C
MTZJ-T-77-4.7B



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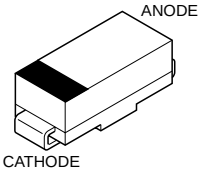

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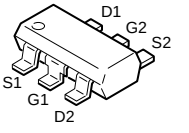

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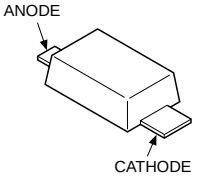


Section 6
Spare Parts

6-1. Notes on Repair Parts

1. Safety Related Components Warning

WARNING

Components marked ⚠ are critical to safe operation. Therefore, specified parts should be used in the case of replacement.

2. Standardization of Parts

Some repair parts supplied by Sony differ from those used for the unit. These are because of parts commonality and improvement.
Parts list has the present standardized repair parts.

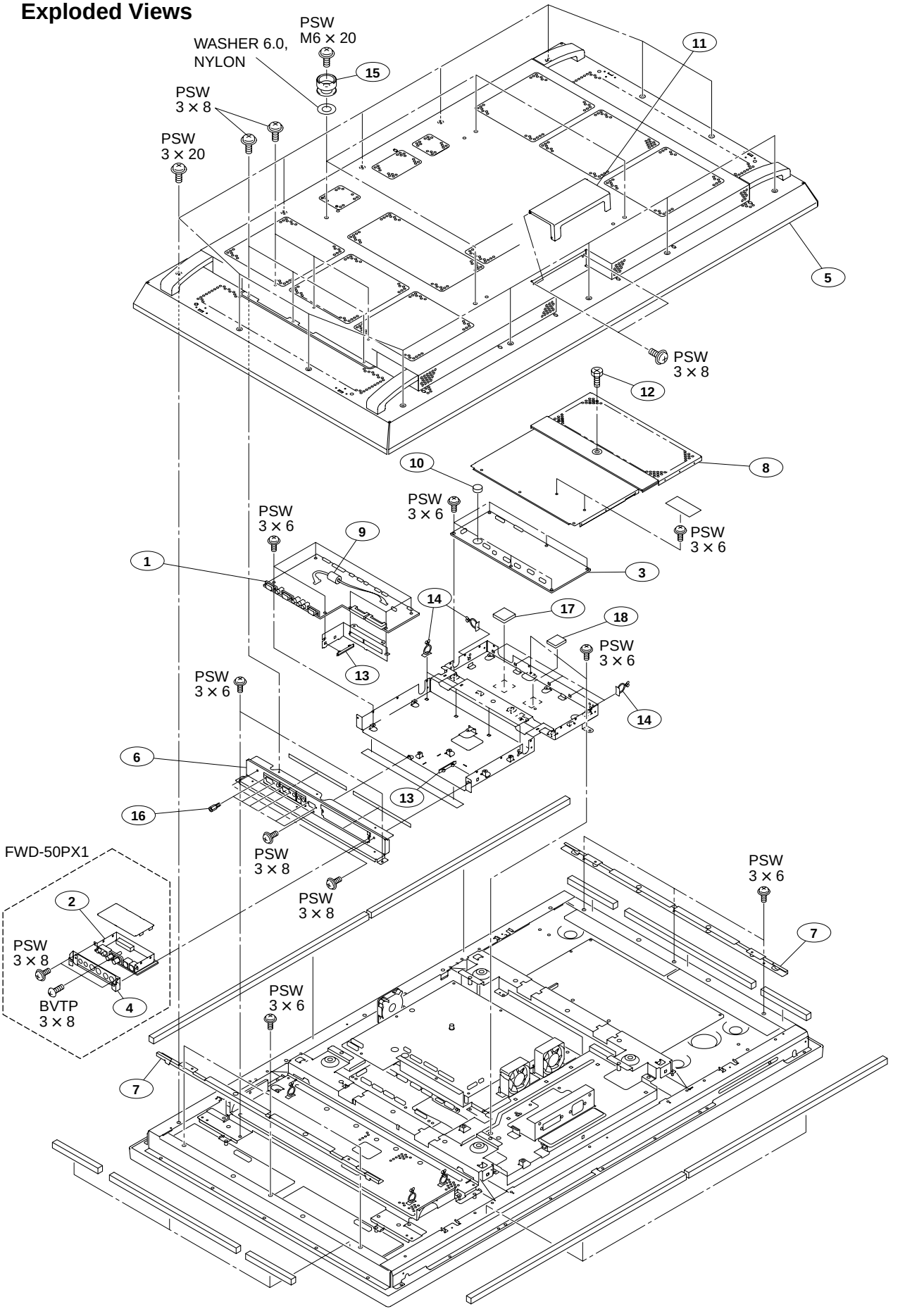
3. Stock of Parts

Parts marked with “o” at SP (Supply Code) column of the spare parts list may not be stocked. Therefore, the delivery date will be delayed.

4. Harness

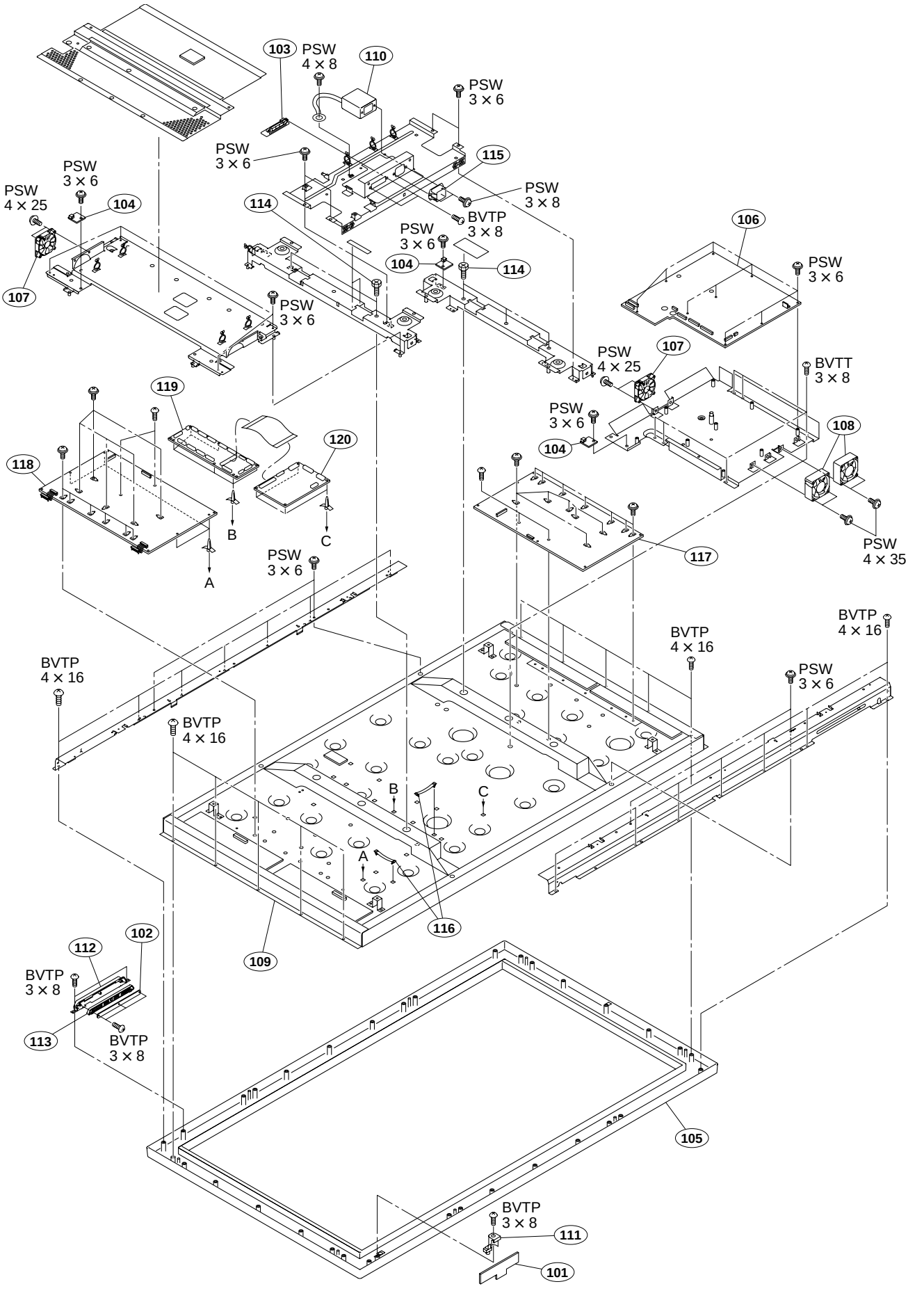
Harnesses with no part number are not registered as spare parts.
In need of repair, get components shown in the list and repair using them.

6-2. Exploded Views



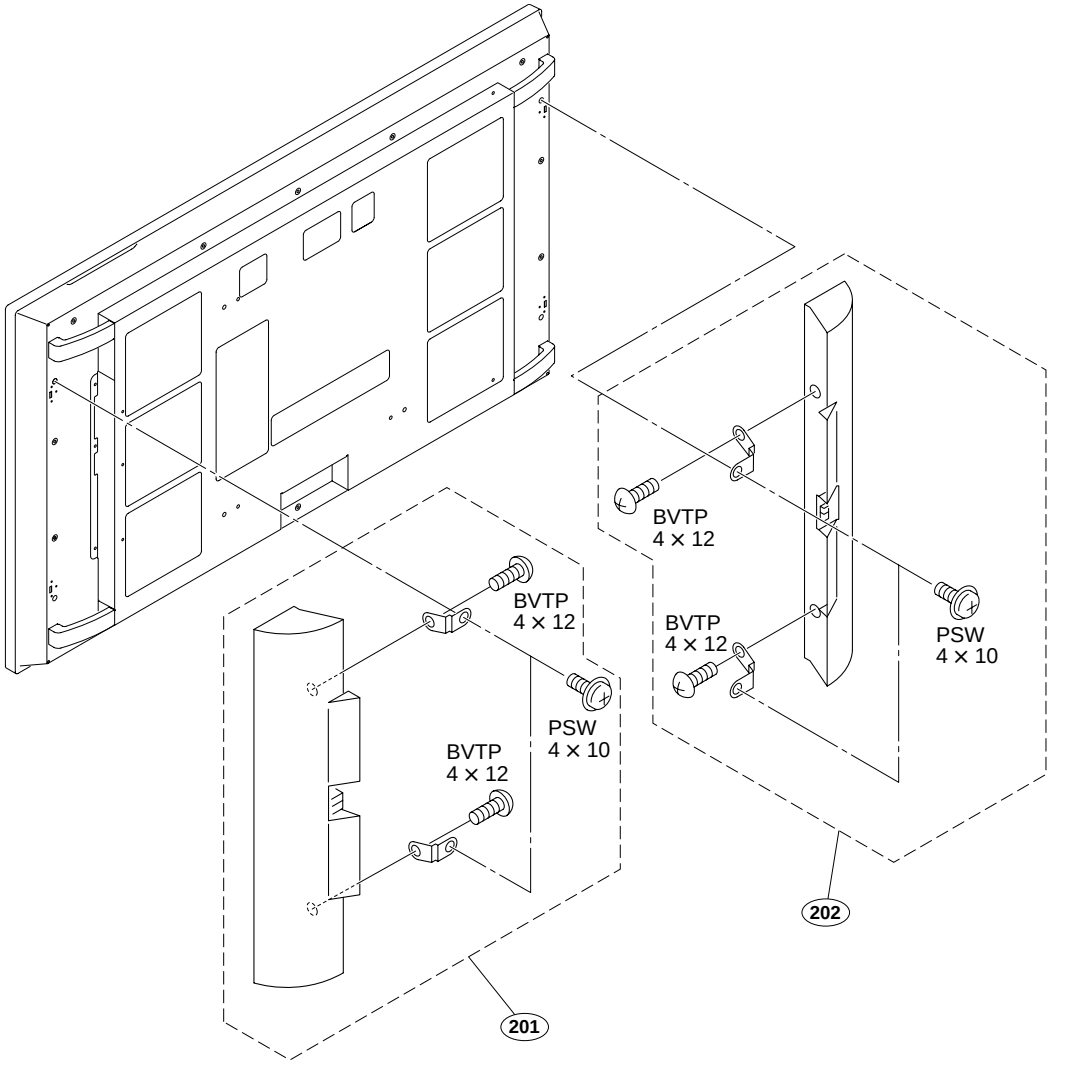
No.	Part No.	SP	Description
1	A-1062-627-A	o	MOUNTED CIRCUIT BOARD, Q
2	A-1063-069-A	o	MOUNTED CIRCUIT BOARD, U1 (FOR FWD-50PX1)
3	A-1070-525-A	o	MOUNTED CIRCUIT BOARD, B
4	X-2022-899-1	s	PANEL ASSY U1 (FOR FWD-50PX1)
5	⚠ X-2022-906-1	s	ASSY, REAR COVER
6	X-2023-679-2	s	ASSY, TERMINAL Q
7	X-2024-621-1	o	ASSY, FRAME SIDE
8	X-2024-710-1	o	ASSY, QB SHIELD COVER
9	1-469-778-11	o	CLAMP, FERRITE
10	⚠ 1-756-157-11	s	BATTERY, LITHIUM (CR1220)
11	2-159-508-01	s	CABLE COVER BOTTOM
12	2-159-533-01	s	BOLT(+) M8X16
13	3-680-613-11	o	SUPPORT, PC BOARD
14	4-035-160-01	s	PURSE LOCK (S) (DIA. 12)
15	4-081-315-02	s	KNOB
16	4-083-966-01	s	SCREW, HEXAGON
17	4-090-178-01	o	SHEET,THERM B-1
18	4-090-179-01	o	SHEET,THERM B-2
	7-623-927-01	s	WASHER,PLASTIC (6X0.5)
	7-628-000-10	s	SCREW +PSW M6X20
	7-682-947-01	s	SCREW +PSW 3X6
	7-682-948-09	s	SCREW +PSW 3X8
	7-682-953-09	s	SCREW +PSW 3X20
	7-685-646-79	s	SCREW +BVTP 3X8

Chassis Block



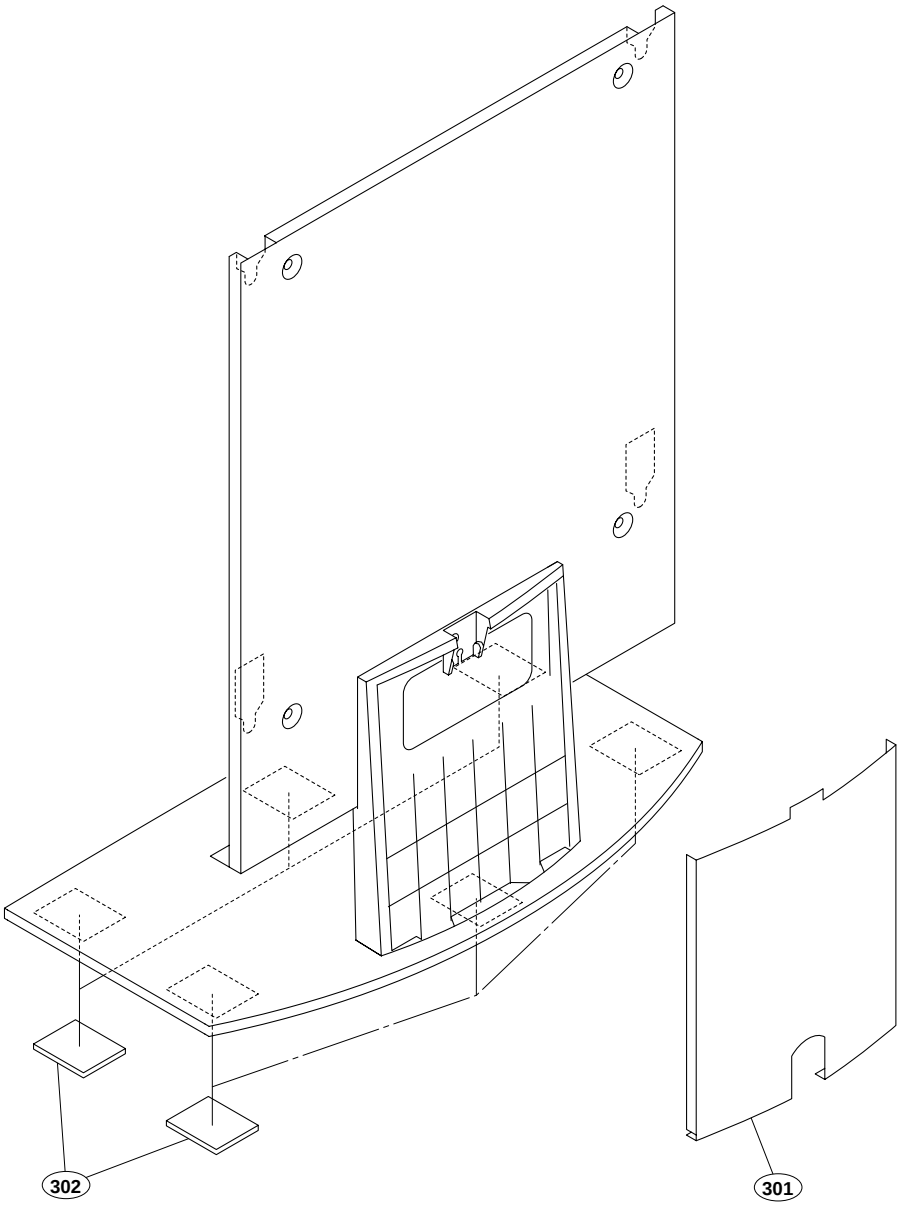
No.		Part No.	SP	Description
101		A-1062-628-A	o	MOUNTED CIRCUIT BOARD, H1
102		A-1062-794-A	o	MOUNTED CIRCUIT BOARD, H2
103		A-1063-073-A	o	MOUNTED CIRCUIT BOARD, SP
104		A-1068-935-A	o	MOUNTED CIRCUIT BOARD, S
105	⚠	X-2022-898-2	s	BEZEL ASSY (SILVER)
	⚠	X-2024-389-1	s	BEZEL ASSY (PEARL WHITE)
	⚠	X-2024-390-1	s	BEZEL ASSY (BLACK)
106	⚠	1-468-872-11	s	POWER UNIT
107	⚠	1-787-088-11	s	D.C. FAN
108	⚠	1-787-243-11	s	D.C. FAN
109	⚠	1-805-676-11	s	DISPLAY PANEL, PLASMA
110	⚠	1-816-887-12	s	AC INLET (WITH NOISE FILTER)
111		2-159-493-02	s	LIGHT GUIDE
112	⚠	2-159-494-01	s	PANEL,BUTTON CONTROL
113	⚠	2-159-495-01	s	BUTTON, CONTROL
114		2-159-533-01	s	BOLT(+) M8X16
115	⚠	2-990-241-02	s	HOLDER (A), PLUG
116		3-225-496-01	o	CLAMP (FLAT CLAMP 45)
117		9-885-061-43	s	X DRIVE BOARD
118		9-885-061-44	s	Y DRIVE BOARD
119		9-885-061-45	s	DIGITAL VIDEO BOARD
120		9-885-061-46	s	INTERFACE BOARD
		7-682-667-09	s	SCREW,+PS 4X25(EP-FE/ZNBK/CM2)
		7-682-947-01	s	SCREW +PSW 3X6
		7-682-948-09	s	SCREW +PSW 3X8
		7-682-961-01	s	SCREW +PSW 4X8
		7-682-969-09	s	SCREW +PSW 4X35(EP-FE/ZNBK/CM2)
		7-685-646-79	s	SCREW +BVTP 3X8
		7-685-663-71	s	SCREW,+BVTP4X16

SS-SP50FW



No.	Part No.	SP	Description
201	A-1080-534-A	s	SPEAKER (50R) ASSY (RP) (FOR SS-SP50FW/W (PEARL WHITE))
	A-1080-536-A	s	SPEAKER (50R) ASSY (RP) (FOR SS-SP50FW/S (SILVER))
202	A-1080-535-A	s	SPEAKER (50L) ASSY (RP) (FOR SS-SP50FW/W (PEARL WHITE))
	A-1080-537-A	s	SPEAKER (50L) ASSY (RP) (FOR SS-SP50FW/S (SILVER))
	7-685-661-79	s	SCREW,+BVTP4X12(EP-FE/ZNBK/CM2)

SU-50FW



No.	Part No.	SP	Description
301	2-148-620-01	o	REAR COVER
302	4-092-541-02	s	FOOT

6-3. Electrical Parts List

B BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-1070-525-A	o	MOUNTED CIRCUIT BOARD, B
BAT500	1-756-156-11	o	HOLDER, BATTERY
C1	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C2	1-115-566-11	s	CAPACITOR,CERAMIC 4.7MF B/6.3V
C3	1-164-227-11	s	CAPACITOR,CERAMIC 0.022MF/25V
C5	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C6	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C7	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C8	1-125-889-11	s	CAPACITOR, CERAMIC 2.2MF
C9	1-126-392-11	s	CAPACITOR,CHIP ELECT100MF/6.3V
C10	1-126-392-11	s	CAPACITOR,CHIP ELECT100MF/6.3V
C11	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C12	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C13	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C14	1-115-566-11	s	CAPACITOR,CERAMIC 4.7MF B/6.3V
C15	1-126-392-11	s	CAPACITOR,CHIP ELECT100MF/6.3V
C16	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C17	1-162-915-11	s	CAPACITOR,CERAMIC 10PF/50V CH
C18	1-126-394-11	s	CAPACITOR,ELECT 10MF/16V(CHIP)
C19	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C20	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C21	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C22	1-115-467-11	s	CAPACITOR CERAMIC 0.22MF/10V B
C23	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C24	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C25	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C26	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C27	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C28	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C29	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C30	1-115-566-11	s	CAPACITOR,CERAMIC 4.7MF B/6.3V
C31	1-115-340-11	s	CAPACITOR CERAMIC 0.22MF/25V B
C32	1-115-340-11	s	CAPACITOR CERAMIC 0.22MF/25V B
C33	1-115-340-11	s	CAPACITOR CERAMIC 0.22MF/25V B
C34	1-127-760-11	s	CAPACITOR,CERAMIC 4.7MF/6.3V
C35	1-164-813-11	s	CAPACITOR,CERAMIC 15PF/50V CH
C36	1-127-760-11	s	CAPACITOR,CERAMIC 4.7MF/6.3V
C37	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C38	1-164-344-11	s	CAPACITOR CERAMIC 68000PF (M-)
C39	1-164-315-11	s	CAPACITOR,CERAMIC 470PF/50V CH
C40	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C41	1-162-969-11	s	CAPACITOR,CERAMIC 6800PF/25V B
C42	1-162-928-11	s	CAPACITOR,CERAMIC 120PF/50V CH
C43	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C44	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C45	1-126-394-11	s	CAPACITOR,ELECT 10MF/16V(CHIP)
C46	1-126-394-11	s	CAPACITOR,ELECT 10MF/16V(CHIP)
C47	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C48	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C49	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C50	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C51	1-127-692-11	s	CAP, CHIP CERAMIC 10MF B 3216
C52	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C53	1-131-661-11	s	CAPACITOR,ELECT 100MF/10V CHIP
C54	1-164-315-11	s	CAPACITOR,CERAMIC 470PF/50V CH
C55	1-163-233-91	s	CAPACITOR,CHIP CERAMIC 18PF/50
C56	1-126-394-11	s	CAPACITOR,ELECT 10MF/16V(CHIP)

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C57	1-109-982-11	s	CAPACITOR,CHIP CERAMIC 1MF/10V
C58	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C59	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C60	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C61	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C62	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C63	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C64	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C65	1-164-813-11	s	CAPACITOR,CERAMIC 15PF/50V CH
C66	1-164-813-11	s	CAPACITOR,CERAMIC 15PF/50V CH
C67	1-131-661-11	s	CAPACITOR,ELECT 100MF/10V CHIP
C68	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C69	1-137-993-11	s	CAPACITOR CHIP ELECT 470MF
C70	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C71	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C72	1-165-585-21	s	CAPACITOR, CHIP ELECT 47MF
C74	1-162-927-11	s	CAPACITOR,CERAMIC 100PF/50V CH
C75	1-162-927-11	s	CAPACITOR,CERAMIC 100PF/50V CH
C76	1-162-927-11	s	CAPACITOR,CERAMIC 100PF/50V CH
C78	1-162-927-11	s	CAPACITOR,CERAMIC 100PF/50V CH
C79	1-162-927-11	s	CAPACITOR,CERAMIC 100PF/50V CH
C80	1-162-927-11	s	CAPACITOR,CERAMIC 100PF/50V CH
C81	1-125-891-11	s	CAPACITOR CERAMIC 0.47MF/10V
C82	1-131-661-11	s	CAPACITOR,ELECT 100MF/10V CHIP
C83	1-127-692-11	s	CAP, CHIP CERAMIC 10MF B 3216
C84	1-126-392-11	s	CAPACITOR,CHIP ELECT100MF/6.3V
C86	1-162-967-11	s	CAPACITOR,CERAMIC 3300PF/50V B
C88	1-162-964-11	s	CAPACITOR,CERAMIC 1000PF/50V B
C89	1-164-505-11	s	CAPACITOR,CHIP CERAMIC 2.2MF
C90	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C201	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C202	1-126-392-11	s	CAPACITOR,CHIP ELECT100MF/6.3V
C203	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C204	1-126-392-11	s	CAPACITOR,CHIP ELECT100MF/6.3V
C205	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C206	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C207	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C208	1-115-670-11	s	CAPACITOR ELECT 220MF/35V(CHIP
C209	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C210	1-126-392-11	s	CAPACITOR,CHIP ELECT100MF/6.3V
C211	1-162-964-11	s	CAPACITOR,CERAMIC 1000PF/50V B
C212	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C214	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C216	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C218	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C220	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C221	1-126-394-11	s	CAPACITOR,ELECT 10MF/16V(CHIP)
C222	1-162-975-11	s	CAPACITOR,CERAMIC 24PF/50V CH
C223	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C224	1-162-975-11	s	CAPACITOR,CERAMIC 24PF/50V CH
C225	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C226	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C227	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C228	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C229	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C230	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C231	1-126-392-11	s	CAPACITOR,CHIP ELECT100MF/6.3V
C232	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C233	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C234	1-109-982-11	s	CAPACITOR,CHIP CERAMIC 1MF/10V
C235	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C236	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C237	1-126-392-11	s	CAPACITOR,CHIP ELECT100MF/6.3V
C238	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C239	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C240	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C241	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C242	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C243	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C244	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C245	1-109-982-11	s	CAPACITOR,CHIP CERAMIC 1MF/10V
C247	1-165-872-21	s	CAPACITOR,SOLID ELECT 47MF
C249	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C250	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C251	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C252	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C253	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C254	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C255	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C256	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C257	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C258	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C259	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C260	1-109-982-11	s	CAPACITOR,CHIP CERAMIC 1MF/10V
C261	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C262	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C263	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C264	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C265	1-127-692-11	s	CAP, CHIP CERAMIC 10MF B 3216
C266	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C270	1-131-661-11	s	CAPACITOR,ELECT 100MF/10V CHIP
C271	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C272	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C273	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C274	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C275	1-127-692-11	s	CAP, CHIP CERAMIC 10MF B 3216
C276	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C401	1-115-670-11	s	CAPACITOR ELECT 220MF/35V(CHIP
C402	1-162-959-11	s	CAPACITOR,CERAMIC 330PF/50V SL
C403	1-125-898-91	s	C-CAP, 0.22-50 Z F
C404	1-125-898-91	s	C-CAP, 0.22-50 Z F
C405	1-125-898-91	s	C-CAP, 0.22-50 Z F
C406	1-125-898-91	s	C-CAP, 0.22-50 Z F
C407	1-110-501-11	s	CAPACITOR CERAMIC 0.33MF/16V
C408	1-162-927-11	s	CAPACITOR,CERAMIC 100PF/50V CH
C409	1-125-898-91	s	C-CAP, 0.22-50 Z F
C410	1-125-898-91	s	C-CAP, 0.22-50 Z F
C411	1-162-927-11	s	CAPACITOR,CERAMIC 100PF/50V CH
C412	1-125-898-91	s	C-CAP, 0.22-50 Z F
C413	1-125-898-91	s	C-CAP, 0.22-50 Z F
C414	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C415	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C416	1-115-670-11	s	CAPACITOR ELECT 220MF/35V(CHIP
C417	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C418	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C419	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C420	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C421	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF

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Ref. No. or Q'ty	Part No.	SP	Description
C422	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C423	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C424	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C425	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C426	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C427	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C428	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C429	1-115-670-11	s	CAPACITOR ELECT 220MF/35V(CHIP
C431	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C432	1-109-982-11	s	CAPACITOR,CHIP CERAMIC 1MF/10V
C433	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C434	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C435	1-109-982-11	s	CAPACITOR,CHIP CERAMIC 1MF/10V
C436	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C437	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C438	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C439	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C440	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C441	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C442	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C443	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C444	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C445	1-115-566-11	s	CAPACITOR,CERAMIC 4.7MF B/6.3V
C446	1-115-566-11	s	CAPACITOR,CERAMIC 4.7MF B/6.3V
C447	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C448	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C449	1-164-230-11	s	CAPACITOR,CERAMIC 220PF/50V
C450	1-115-566-11	s	CAPACITOR,CERAMIC 4.7MF B/6.3V
C451	1-115-566-11	s	CAPACITOR,CERAMIC 4.7MF B/6.3V
C452	1-115-566-11	s	CAPACITOR,CERAMIC 4.7MF B/6.3V
C453	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C454	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C455	1-126-394-11	s	CAPACITOR,ELECT 10MF/16V(CHIP)
C456	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C457	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C458	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C459	1-162-927-11	s	CAPACITOR,CERAMIC 100PF/50V CH
C460	1-164-230-11	s	CAPACITOR,CERAMIC 220PF/50V
C461	1-162-919-11	s	CAPACITOR,CERAMIC 22PF/50V CH
C462	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C463	1-137-993-11	s	CAPACITOR CHIP ELECT 470MF
C464	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C465	1-164-227-11	s	CAPACITOR,CERAMIC 0.022MF/25V
C466	1-164-227-11	s	CAPACITOR,CERAMIC 0.022MF/25V
C467	1-164-227-11	s	CAPACITOR,CERAMIC 0.022MF/25V
C468	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C469	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C604	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C605	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C606	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C607	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C608	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C609	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C610	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C611	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C612	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C613	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C614	1-128-360-11	s	CAPACITOR,ELECT 220MF/10V CHIP
C615	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF

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Ref. No. or Q'ty	Part No.	SP	Description
C616	1-128-304-11	s	CAPACITOR, CHIP ELECT 330MF
C617	1-128-304-11	s	CAPACITOR, CHIP ELECT 330MF
C618	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C619	1-126-392-11	s	CAPACITOR,CHIP ELECT100MF/6.3V
C620	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C621	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C624	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C625	1-128-360-11	s	CAPACITOR,ELECT 220MF/10V CHIP
C626	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C627	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C628	1-115-412-11	s	CAPACITOR,CERAMIC 680PF/25V CH
C629	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C630	1-162-964-11	s	CAPACITOR,CERAMIC 1000PF/50V B
C801	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C802	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C803	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C804	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C805	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C806	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C807	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C808	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C809	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C810	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C811	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C812	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C813	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C814	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C815	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C816	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C817	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C818	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C819	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C820	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C821	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C822	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C823	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C824	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C825	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C826	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C827	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C828	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C829	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C830	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C831	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C832	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C833	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C834	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C835	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C836	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C837	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C838	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C839	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C840	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C841	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C842	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C843	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C844	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C845	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C846	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF

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Ref. No. or Q'ty	Part No.	SP	Description
C847	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C848	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C849	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C850	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C851	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C852	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C853	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1001	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C1005	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C1007	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1008	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1009	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1010	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C1011	1-126-391-11	s	CAPACITOR ELECT 47MF/6.3V(105)
C1012	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1013	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1014	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1015	1-125-889-11	s	CAPACITOR, CERAMIC 2.2MF
C1016	1-162-915-11	s	CAPACITOR,CERAMIC 10PF/50V CH
C1017	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1018	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1019	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1020	1-162-915-11	s	CAPACITOR,CERAMIC 10PF/50V CH
C1021	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1022	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1023	1-164-315-11	s	CAPACITOR,CERAMIC 470PF/50V CH
C1024	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1025	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1026	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1027	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1028	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1029	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1030	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1032	1-126-392-11	s	CAPACITOR,CHIP ELECT100MF/6.3V
C1033	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1034	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1035	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1036	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1037	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1038	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1039	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1042	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1043	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1044	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1045	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1046	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1047	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1048	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1049	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1052	1-125-889-11	s	CAPACITOR, CERAMIC 2.2MF
C1053	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1054	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1055	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1056	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1234	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1235	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1236	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1238	1-164-315-11	s	CAPACITOR,CERAMIC 470PF/50V CH
C1239	1-107-682-11	s	CAPACITOR,CHIP 1MF/16V (3216)

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Ref. No. or Q'ty	Part No.	SP	Description
C1240	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C1241	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7001	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7002	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7003	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7004	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7005	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7006	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7007	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7008	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7009	1-126-392-11	s	CAPACITOR,CHIP ELECT100MF/6.3V
C7010	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7011	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7012	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7013	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7015	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7022	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7027	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7030	1-126-392-11	s	CAPACITOR,CHIP ELECT100MF/6.3V
C7203	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7204	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7205	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7206	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7207	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7208	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7209	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7210	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7211	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7212	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7213	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7214	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7215	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7218	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7219	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7220	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7221	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7222	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7223	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7224	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7225	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7226	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7227	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7228	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7229	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7230	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7231	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7234	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7235	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7236	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7237	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7238	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7239	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7240	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7241	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C7244	1-126-392-11	s	CAPACITOR,CHIP ELECT100MF/6.3V
C7245	1-126-392-11	s	CAPACITOR,CHIP ELECT100MF/6.3V
C7246	1-126-392-11	s	CAPACITOR,CHIP ELECT100MF/6.3V
C7247	1-126-392-11	s	CAPACITOR,CHIP ELECT100MF/6.3V
C7248	1-126-392-11	s	CAPACITOR,CHIP ELECT100MF/6.3V

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
CLP1	4-042-408-02	o	PIN, COATING LEAD
CN101	1-695-209-21	s	PIN, CONNECTOR (PC BOARD) 15P
CN102	1-779-992-11	s	PIN, CONNECTOR (PWB) 8P
CN103	1-764-081-21	s	PIN, CONNECTOR (PC BOARD) 9P
CN401	1-695-889-21	s	PIN, CONNECTOR (PC BOARD) 10P
CN1001	1-779-339-21	s	CONNECTOR, FFC/FPC 30P
CN1002	1-764-080-21	o	PIN, CONNECTOR (PC BOARD) 8P
CN1003	1-785-946-41	s	CONNECTOR 3P
CN1004	1-764-079-21	s	PIN, CONNECTOR (PC BOARD) 4P
CN1005	1-750-635-21	o	PIN, CONNECTOR (PC BOARD) 5P
CN1006	1-764-078-11	s	PIN, CONNECTOR (PC BOARD) 3P
CN7001	1-691-591-11	o	PIN,CONNECTOR (8P)(SMD)(1.5MM)
CN7002	1-815-161-21	s	CONNECTOR, BOARD TO WIRE 31P
CN7025	1-764-080-21	o	PIN, CONNECTOR (PC BOARD) 8P
D1	8-719-056-23	s	DIODE MA2S111-(K8)
D401	8-719-056-23	s	DIODE MA2S111-(K8)
D402	8-719-914-43	s	DIODE DAN202K
D403	8-719-914-43	s	DIODE DAN202K
D1002	8-719-056-23	s	DIODE MA2S111-(K8)
D1003	8-719-056-23	s	DIODE MA2S111-(K8)
D1004	8-719-024-77	s	DIODE HN1D03FU-TE85L
D1005	8-719-056-23	s	DIODE MA2S111-(K8)
D1006	8-719-056-23	s	DIODE MA2S111-(K8)
D1007	8-719-421-59	s	DIODE MA3130WA-TX
F1	⚠ 1-576-604-11	s	FUSE 1A 72V
F2	⚠ 1-576-788-21	s	FUSE 5A 72V
F3	⚠ 1-576-604-11	s	FUSE 1A 72V
F4	⚠ 1-576-788-21	s	FUSE 5A 72V
FB83	1-400-392-21	s	INDUCTOR, FERRITE BEAD
FB85	1-400-392-21	s	INDUCTOR, FERRITE BEAD
FB401	1-414-234-11	s	INDUCTOR,FERRITE BEAD
FB801	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB802	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB803	1-414-235-22	s	INDUCTOR, FERRITE BEAD
FB1205	1-216-864-11	s	CONDUCTOR, CHIP (1608)
FB1206	1-216-864-11	s	CONDUCTOR, CHIP (1608)
FB1207	1-216-864-11	s	CONDUCTOR, CHIP (1608)
FB7001	1-414-864-11	s	INDUCTOR, MICRO (CHIP TYPE)
FB7002	1-414-445-11	s	FERRITE, EMI (SMD)
FB7003	1-414-864-11	s	INDUCTOR, MICRO (CHIP TYPE)
FB7011	1-414-864-11	s	INDUCTOR, MICRO (CHIP TYPE)
FB7016	1-414-864-11	s	INDUCTOR, MICRO (CHIP TYPE)
FB7105	1-414-864-11	s	INDUCTOR, MICRO (CHIP TYPE)
FB7111	1-469-379-11	s	FERRITE, EMI (SMD)
FB7113	1-414-864-11	s	INDUCTOR, MICRO (CHIP TYPE)
FL1	1-233-505-21	s	FILTER, LOW PASS
FL2	1-233-505-21	s	FILTER, LOW PASS
FL3	1-233-505-21	s	FILTER, LOW PASS
FL400	1-239-558-11	s	FILTER, CHIP EMI
FL7001	1-234-177-11	s	FILTER, CHIP EMI (1.0MF.B)
IC1	8-759-443-08	s	IC TC7W241FU (TE12R)
IC2	8-752-107-30	s	IC CXA2163AQ-T6
IC3	8-759-082-61	s	IC TC4W53FU
IC4	8-759-638-04	s	IC Z8622912SSC-00TR
IC5	8-752-053-21	s	IC CXA1211M
IC6	8-752-390-35	s	IC CXD2057M-T6
IC7	8-759-533-85	s	IC L88M05T-FA-TL

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC8	8-759-523-96	s	IC TC74VHC86FT (EL)
IC9	8-759-239-55	s	IC TC74HC123AF
IC201	8-749-018-41	s	IC SI-3025LSA-TL
IC202	8-749-018-41	s	IC SI-3025LSA-TL
IC204	8-759-031-84	s	IC SC7S04F
IC205	8-759-436-89	s	IC MC141627FT
IC206	6-700-960-01	s	IC UPD64083GF-3BA
IC207	8-759-987-27	s	IC LM1881M
IC208	8-759-082-61	s	IC TC4W53FU
IC209	8-759-082-61	s	IC TC4W53FU
IC401	8-759-533-85	s	IC L88M05T-FA-TL
IC402	8-759-460-72	s	IC BA033FP
IC403	8-752-095-84	s	IC CXA3516R
IC404	8-759-646-02	s	IC M52347FP-TE
IC405	8-759-596-34	s	IC SN74LV4053APWR
IC406	8-759-058-62	s	IC TC7S08FU-TE85R
IC601	8-759-837-36	s	IC CXD9606Q
IC603	8-759-676-70	s	IC MSM56V16160F-10TS-K
IC604	8-759-549-00	s	IC SN74LV123APWR
IC801	6-700-681-01	s	IC IP00C713
IC802	8-759-676-70	s	IC MSM56V16160F-10TS-K
IC803	8-759-676-70	s	IC MSM56V16160F-10TS-K
IC804	8-759-676-70	s	IC MSM56V16160F-10TS-K
IC1003	8-759-560-17	s	IC RS5C348A-E2
IC1004	8-759-648-10	s	IC HD64F2633TE
IC1005	6-703-224-01	s	IC S-80828CNNB-B8NT2G
IC1006	8-759-058-62	s	IC TC7S08FU-TE85R
IC1007	6-702-688-01	s	IC M24C64-WMN6T(B)
IC1009	8-759-443-08	s	IC TC7W241FU (TE12R)
IC1010	8-759-524-50	s	IC TC74VHC541FT(EL)
IC1011	8-759-490-41	s	IC TC74VHCT541AFT(EL)
IC1012	8-759-599-01	s	IC TC74VHCT14AFT(EL)
IC1016	8-759-277-63	s	IC TC7W14FU (TE12R)
IC1017	8-759-652-56	s	IC BA033F-E2
IC1019	8-759-669-50	s	IC SN74CBTD3306PWR-12
IC1020	6-704-319-01	s	IC S-80842CNNB-B83T2G
IC1205	6-700-683-01	s	IC MB90098APF-A-130-BND-ER
IC7001	6-700-592-01	s	IC DS90C387VJDX
IC7002	6-701-680-01	s	IC PST3629NR
IC7003	8-749-015-18	s	IC PQ07VZ012P
IC7026	8-759-666-13	s	IC PST9229NL
IC7101	6-804-668-01	s	IC XC18V02-VQG44C1
L1	1-412-052-21	s	INDUCTOR, SMALL TYPE 1.00UH
L2	1-412-052-21	s	INDUCTOR, SMALL TYPE 1.00UH
L3	1-412-052-21	s	INDUCTOR, SMALL TYPE 1.00UH
L4	1-412-052-21	s	INDUCTOR, SMALL TYPE 1.00UH
L5	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L6	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L7	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L8	1-412-061-11	s	INDUCTOR (SMALL TYPE) 33UH
L201	1-419-098-21	s	INDUCTORS (POWER)
L202	1-412-063-21	s	INDUCTOR, SMALL TYPE 68UH
L204	1-412-052-21	s	INDUCTOR, SMALL TYPE 1.00UH
L205	1-412-052-21	s	INDUCTOR, SMALL TYPE 1.00UH
L207	1-412-052-21	s	INDUCTOR, SMALL TYPE 1.00UH
L208	1-412-052-21	s	INDUCTOR, SMALL TYPE 1.00UH
L401	1-412-052-21	s	INDUCTOR, SMALL TYPE 1.00UH
L601	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
L602	1-412-030-11	s	INDUCTOR,CHIP 22UH (3225)
L603	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L604	1-412-030-11	s	INDUCTOR,CHIP 22UH (3225)
L801	1-500-451-11	s	MICRO INDUCTOR (CHIP) 41P750S
L7001	1-781-667-12	s	COIL, COMMON MODE CHOKE
L7002	1-781-667-12	s	COIL, COMMON MODE CHOKE
L7003	1-781-667-12	s	COIL, COMMON MODE CHOKE
L7004	1-781-667-12	s	COIL, COMMON MODE CHOKE
L7005	1-781-667-12	s	COIL, COMMON MODE CHOKE
L7006	1-781-667-12	s	COIL, COMMON MODE CHOKE
L7007	1-781-667-12	s	COIL, COMMON MODE CHOKE
L7008	1-781-667-12	s	COIL, COMMON MODE CHOKE
L7009	1-781-667-12	s	COIL, COMMON MODE CHOKE
Q1	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q2	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q3	8-729-927-99	s	TRANSISTOR 2SC4617R
Q4	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q5	8-729-216-22	s	TRANSISTOR 2SA1162-G
Q6	8-729-927-99	s	TRANSISTOR 2SC4617R
Q7	8-729-928-81	s	TRANSISTOR DTC144EE
Q8	8-729-927-99	s	TRANSISTOR 2SC4617R
Q9	8-729-216-22	s	TRANSISTOR 2SA1162-G
Q10	8-729-927-99	s	TRANSISTOR 2SC4617R
Q11	8-729-927-99	s	TRANSISTOR 2SC4617R
Q12	8-729-216-22	s	TRANSISTOR 2SA1162-G
Q13	8-729-216-22	s	TRANSISTOR 2SA1162-G
Q14	8-729-216-22	s	TRANSISTOR 2SA1162-G
Q15	8-729-928-19	s	TRANSISTOR 2SA1774R
Q16	8-729-928-19	s	TRANSISTOR 2SA1774R
Q17	8-729-927-99	s	TRANSISTOR 2SC4617R
Q18	8-729-928-81	s	TRANSISTOR DTC144EE
Q19	8-729-928-19	s	TRANSISTOR 2SA1774R
Q20	8-729-927-99	s	TRANSISTOR 2SC4617R
Q21	8-729-927-99	s	TRANSISTOR 2SC4617R
Q22	8-729-927-99	s	TRANSISTOR 2SC4617R
Q23	8-729-927-99	s	TRANSISTOR 2SC4617R
Q24	8-729-927-99	s	TRANSISTOR 2SC4617R
Q25	8-729-927-99	s	TRANSISTOR 2SC4617R
Q26	8-729-927-99	s	TRANSISTOR 2SC4617R
Q27	8-729-928-19	s	TRANSISTOR 2SA1774R
Q28	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q29	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q30	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q31	8-729-112-48	s	TRANSISTOR 2SA1462-T1Y33
Q32	8-729-112-48	s	TRANSISTOR 2SA1462-T1Y33
Q33	8-729-112-48	s	TRANSISTOR 2SA1462-T1Y33
Q201	8-729-928-19	s	TRANSISTOR 2SA1774R
Q203	8-729-928-19	s	TRANSISTOR 2SA1774R
Q204	8-729-927-99	s	TRANSISTOR 2SC4617R
Q205	8-729-928-19	s	TRANSISTOR 2SA1774R
Q206	8-729-927-99	s	TRANSISTOR 2SC4617R
Q207	8-729-927-99	s	TRANSISTOR 2SC4617R
Q208	8-729-927-99	s	TRANSISTOR 2SC4617R
Q209	8-729-928-19	s	TRANSISTOR 2SA1774R
Q210	8-729-927-99	s	TRANSISTOR 2SC4617R
Q211	8-729-928-19	s	TRANSISTOR 2SA1774R
Q212	8-729-927-99	s	TRANSISTOR 2SC4617R
Q213	8-729-928-19	s	TRANSISTOR 2SA1774R

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
Q214	8-729-928-81	s	TRANSISTOR DTC144EE
Q215	8-729-927-99	s	TRANSISTOR 2SC4617R
Q216	8-729-927-99	s	TRANSISTOR 2SC4617R
Q217	8-729-928-19	s	TRANSISTOR 2SA1774R
Q218	8-729-928-19	s	TRANSISTOR 2SA1774R
Q401	8-729-928-19	s	TRANSISTOR 2SA1774R
Q402	8-729-927-99	s	TRANSISTOR 2SC4617R
Q403	8-729-927-99	s	TRANSISTOR 2SC4617R
Q404	8-729-928-81	s	TRANSISTOR DTC144EE
Q405	8-729-928-81	s	TRANSISTOR DTC144EE
Q406	8-729-928-81	s	TRANSISTOR DTC144EE
Q407	8-729-927-99	s	TRANSISTOR 2SC4617R
Q408	8-729-927-99	s	TRANSISTOR 2SC4617R
Q409	8-729-927-99	s	TRANSISTOR 2SC4617R
Q410	8-729-927-99	s	TRANSISTOR 2SC4617R
Q411	8-729-928-19	s	TRANSISTOR 2SA1774R
Q412	8-729-928-19	s	TRANSISTOR 2SA1774R
Q413	8-729-928-19	s	TRANSISTOR 2SA1774R
Q414	8-729-928-19	s	TRANSISTOR 2SA1774R
Q415	8-729-928-19	s	TRANSISTOR 2SA1774R
Q416	8-729-928-81	s	TRANSISTOR DTC144EE
Q417	8-729-928-81	s	TRANSISTOR DTC144EE
Q418	8-729-928-81	s	TRANSISTOR DTC144EE
Q419	8-729-928-81	s	TRANSISTOR DTC144EE
Q1001	8-729-927-99	s	TRANSISTOR 2SC4617R
Q1002	8-729-928-19	s	TRANSISTOR 2SA1774R
R1	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R2	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R3	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R4	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R5	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R6	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R7	1-218-726-11	s	RESISTOR CHIP 27K 1/16W (1608)
R8	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R9	1-216-855-11	s	RESISTOR, CHIP 680K 1/10W 1608
R10	1-216-828-11	s	RESISTOR, CHIP 3.9K 1/10W 1608
R11	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R12	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R13	1-216-855-11	s	RESISTOR, CHIP 680K 1/10W 1608
R14	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R15	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R16	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R17	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R18	1-218-713-11	s	RESISTOR,METAL 7.5K 1/16W
R19	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R20	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R21	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R22	1-216-819-11	s	RESISTOR,CHIP 680 1/10W 1608
R23	1-216-818-11	s	RESISTOR, CHIP 560 1/10W 1608
R24	1-216-819-11	s	RESISTOR,CHIP 680 1/10W 1608
R25	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R26	1-216-819-11	s	RESISTOR,CHIP 680 1/10W 1608
R27	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R28	1-216-819-11	s	RESISTOR,CHIP 680 1/10W 1608
R29	1-216-830-11	s	RESISTOR,CHIP 5.6K 1/10W 1608
R30	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R31	1-216-839-11	s	RESISTOR,CHIP 33K 1/10W 1608
R32	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R33	1-218-867-11	s	RESISTOR,CHIP 6.8K 1/10W(1608)
R34	1-216-819-11	s	RESISTOR,CHIP 680 1/10W 1608
R35	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R36	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R37	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R38	1-216-817-11	s	RESISTOR,CHIP 470 1/10W 1608
R39	1-216-830-11	s	RESISTOR,CHIP 5.6K 1/10W 1608
R40	1-216-813-11	s	RESISTOR, CHIP 220 1/10W 1608
R41	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R42	1-218-712-11	s	RESISTOR,METAL 6.8K 1/16W
R43	1-216-819-11	s	RESISTOR,CHIP 680 1/10W 1608
R44	1-216-819-11	s	RESISTOR,CHIP 680 1/10W 1608
R45	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R46	1-218-684-11	s	RESISTOR,CHIP 470 1/16W (1608)
R47	1-218-716-11	s	RESISTOR,CHIP 10K 1/16W(1608)
R48	1-216-818-11	s	RESISTOR, CHIP 560 1/10W 1608
R49	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R50	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R51	1-216-815-11	s	RESISTOR,CHIP 330 1/10W 1608
R52	1-216-819-11	s	RESISTOR,CHIP 680 1/10W 1608
R53	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R54	1-216-830-11	s	RESISTOR,CHIP 5.6K 1/10W 1608
R55	1-216-818-11	s	RESISTOR, CHIP 560 1/10W 1608
R56	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R57	1-218-700-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R58	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R59	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R60	1-218-724-11	s	RESISTOR,CHIP 22K 1/16W(1608)
R61	1-218-698-11	s	RESISTOR,CHIP 1.8K 1/16W(1608)
R62	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R64	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R65	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R66	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R67	1-218-710-11	s	RESISTOR,CHIP 5.6K 1/16W(1608)
R68	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R69	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R70	1-218-708-11	s	RESISTOR,CHIP 4.7K 1/16W(1608)
R71	1-218-714-11	s	RESISTOR,CHIP 8.2K 1/16W(1608)
R72	1-218-702-11	s	RESISTOR CHIP 2.7K 1/16W(1608)
R73	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R74	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R75	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R76	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R77	1-216-820-11	s	RESISTOR, CHIP 820 1/10W 1608
R78	1-218-676-11	s	RESISTOR,CHIP 220 1/16W(1608)
R79	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R80	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R81	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R82	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R83	1-218-693-11	s	RESISTOR,CHIP 1.1K 1/16W(1608)
R84	1-218-704-11	s	RESISTOR,CHIP 3.3K 1/16W(1608)
R85	1-218-704-11	s	RESISTOR,CHIP 3.3K 1/16W(1608)
R86	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R89	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R90	1-218-684-11	s	RESISTOR,CHIP 470 1/16W (1608)
R91	1-218-694-11	s	RESISTOR,CHIP 1.2K1/16W(1608)
R92	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R93	1-218-672-11	s	RESISTOR,CHIP 150 1/16W(1608)
R94	1-218-708-11	s	RESISTOR,CHIP 4.7K 1/16W(1608)

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R95	1-218-702-11	s	RESISTOR CHIP 2.7K 1/16W(1608)
R96	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R97	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R98	1-218-668-11	s	RESISTOR,CHIP 100 1/16W (1608)
R99	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R100	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R101	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R102	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R103	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R104	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R105	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R106	1-216-813-11	s	RESISTOR, CHIP 220 1/10W 1608
R107	1-216-813-11	s	RESISTOR, CHIP 220 1/10W 1608
R108	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R109	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R110	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R112	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R113	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R118	1-216-857-11	s	RESISTOR,CHIP 1M 1/10W(1608)
R119	1-216-857-11	s	RESISTOR,CHIP 1M 1/10W(1608)
R120	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R121	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R122	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R123	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R124	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R125	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R126	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R127	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R128	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R129	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R130	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R131	1-216-853-11	s	RESISTOR,CHIP 470K 1/16W(1608)
R132	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R133	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R134	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R201	1-218-867-11	s	RESISTOR,CHIP 6.8K 1/10W(1608)
R202	1-216-840-11	s	RESISTOR,CHIP 39K 1/10W 1608
R204	1-216-813-11	s	RESISTOR, CHIP 220 1/10W 1608
R205	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R207	1-218-678-11	s	RESISTOR CHIP 270 1/16W (1608)
R213	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R214	1-218-661-11	s	RESISTOR,CHIP 51 1/16W (1608)
R215	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R216	1-218-853-11	s	RESISTOR,CHIP 1.8K 1/10W(1608)
R217	1-218-853-11	s	RESISTOR,CHIP 1.8K 1/10W(1608)
R218	1-218-853-11	s	RESISTOR,CHIP 1.8K 1/10W(1608)
R219	1-218-853-11	s	RESISTOR,CHIP 1.8K 1/10W(1608)
R220	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R223	1-218-731-11	s	RESISTOR,METAL 43K 1/16
R232	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R233	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R236	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R239	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R240	1-216-835-11	s	RESISTOR,CHIP 15K 1/10W
R245	1-216-813-11	s	RESISTOR, CHIP 220 1/10W 1608
R246	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R248	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R252	1-216-822-11	s	RESISTOR, CHIP 1.2K 1/10W 1608
R255	1-218-853-11	s	RESISTOR,CHIP 1.8K 1/10W(1608)

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R256	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R257	1-216-839-11	s	RESISTOR,CHIP 33K 1/10W 1608
R258	1-216-836-11	s	RESISTOR, CHIP 18K 1/10W 1608
R260	1-216-813-11	s	RESISTOR, CHIP 220 1/10W 1608
R261	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R262	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R263	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R265	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R266	1-218-690-11	s	RESISTOR,CHIP 820 1/16W (1608)
R269	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R271	1-216-816-11	s	RESISTOR, CHIP 390 1/10W 1608
R272	1-218-688-11	s	RESISTOR,CHIP 680 1/16W(1608)
R273	1-218-712-11	s	RESISTOR,METAL 6.8K 1/16W
R274	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R275	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R276	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R277	1-216-855-11	s	RESISTOR, CHIP 680K 1/10W 1608
R279	1-216-823-11	s	RESISTOR, CHIP 1.5K 1/10W
R280	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R281	1-216-823-11	s	RESISTOR, CHIP 1.5K 1/10W
R282	1-218-867-11	s	RESISTOR,CHIP 6.8K 1/10W(1608)
R283	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R284	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R285	1-218-684-11	s	RESISTOR,CHIP 470 1/16W (1608)
R286	1-216-815-11	s	RESISTOR,CHIP 330 1/10W 1608
R287	1-216-839-11	s	RESISTOR,CHIP 33K 1/10W 1608
R288	1-216-836-11	s	RESISTOR, CHIP 18K 1/10W 1608
R289	1-218-708-11	s	RESISTOR,CHIP 4.7K 1/16W(1608)
R290	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R291	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R292	1-218-686-11	s	RESISTOR CHIP 560 1/16W (1608)
R293	1-218-684-11	s	RESISTOR,CHIP 470 1/16W (1608)
R294	1-218-688-11	s	RESISTOR,CHIP 680 1/16W(1608)
R295	1-218-720-11	s	RESISTOR,CHIP 15K 1/16W(1608)
R296	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R298	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R299	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R301	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R302	1-216-817-11	s	RESISTOR,CHIP 470 1/10W 1608
R303	1-216-817-11	s	RESISTOR,CHIP 470 1/10W 1608
R304	1-216-817-11	s	RESISTOR,CHIP 470 1/10W 1608
R305	1-216-823-11	s	RESISTOR, CHIP 1.5K 1/10W
R306	1-216-823-11	s	RESISTOR, CHIP 1.5K 1/10W
R307	1-216-823-11	s	RESISTOR, CHIP 1.5K 1/10W
R308	1-216-823-11	s	RESISTOR, CHIP 1.5K 1/10W
R401	1-216-827-11	s	RESISTOR, CHIP 3.3K 1/10W 1608
R402	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R403	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R404	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R405	1-218-703-11	s	RESISTOR,CHIP 3.0K 1/16(1608)
R406	1-218-690-11	s	RESISTOR,CHIP 820 1/16W (1608)
R407	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R409	1-218-690-11	s	RESISTOR,CHIP 820 1/16W (1608)
R410	1-218-690-11	s	RESISTOR,CHIP 820 1/16W (1608)
R411	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R412	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R413	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R414	1-216-817-11	s	RESISTOR,CHIP 470 1/10W 1608
R415	1-216-817-11	s	RESISTOR,CHIP 470 1/10W 1608

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R416	1-216-817-11	s	RESISTOR,CHIP 470 1/10W 1608
R417	1-216-823-11	s	RESISTOR, CHIP 1.5K 1/10W
R418	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R419	1-218-722-11	s	RESISTOR, CHIP 18K 1/16W 1608
R420	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R421	1-218-722-11	s	RESISTOR, CHIP 18K 1/16W 1608
R423	1-218-744-11	s	RESISTOR,CHIP 150K 1/16W
R424	1-218-707-11	s	RESISTOR,CHIP 4.3K 1/16W(1608)
R425	1-218-740-11	s	RESISTOR,CHIP 100K 1/16W(1608)
R426	1-218-700-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R427	1-218-700-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R428	1-218-700-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R429	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R430	1-218-744-11	s	RESISTOR,CHIP 150K 1/16W
R431	1-218-744-11	s	RESISTOR,CHIP 150K 1/16W
R432	1-218-660-91	s	RESISTOR,CHIP 47 1/16W (1608)
R433	1-218-724-11	s	RESISTOR,CHIP 22K 1/16W(1608)
R434	1-218-724-11	s	RESISTOR,CHIP 22K 1/16W(1608)
R435	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R440	1-218-867-11	s	RESISTOR,CHIP 6.8K 1/10W(1608)
R441	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R442	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R443	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R444	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R445	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R446	1-218-899-11	s	RESISTOR,CHIP 150K 1/10W(1608)
R447	1-216-827-11	s	RESISTOR, CHIP 3.3K 1/10W 1608
R448	1-216-827-11	s	RESISTOR, CHIP 3.3K 1/10W 1608
R449	1-216-827-11	s	RESISTOR, CHIP 3.3K 1/10W 1608
R450	1-216-826-11	s	RESISTOR,CHIP 2.7K 1/10W(1608)
R451	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R452	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R453	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R454	1-216-797-11	s	RESISTOR,CHIP 10 1/10W 1608
R455	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R456	1-216-843-11	s	RESISTOR,CHIP 68K 1/10W (1608)
R457	1-216-843-11	s	RESISTOR,CHIP 68K 1/10W (1608)
R458	1-216-843-11	s	RESISTOR,CHIP 68K 1/10W (1608)
R459	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R460	1-216-830-11	s	RESISTOR,CHIP 5.6K 1/10W 1608
R604	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R607	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R608	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R609	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R610	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R611	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R612	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R613	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R614	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R615	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R616	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R620	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R621	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R622	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R623	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R624	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R625	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R626	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R627	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R629	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R630	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R631	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R632	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R633	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R634	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R635	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R636	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R637	1-218-724-11	s	RESISTOR,CHIP 22K 1/16W(1608)
R638	1-218-700-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R801	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R802	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R803	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R804	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R805	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R806	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R1001	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R1002	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R1003	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R1004	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R1005	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R1006	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R1007	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R1008	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R1009	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R1010	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R1011	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R1013	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R1015	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R1016	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R1017	1-216-838-11	s	RESISTOR CHIP 27K 1/10W(1608)
R1018	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R1019	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R1020	1-218-675-11	s	RESISTOR,CHIP 200 1/16W (1608)
R1021	1-218-703-11	s	RESISTOR,CHIP 3.0K 1/16(1608)
R1022	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R1023	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R1024	1-216-797-11	s	RESISTOR,CHIP 10 1/10W 1608
R1025	1-216-797-11	s	RESISTOR,CHIP 10 1/10W 1608
R1026	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R1027	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R1028	1-216-797-11	s	RESISTOR,CHIP 10 1/10W 1608
R1029	1-216-797-11	s	RESISTOR,CHIP 10 1/10W 1608
R1030	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R1031	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R1032	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R1033	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R1034	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R1035	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R1036	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R1037	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R1038	1-218-871-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R1041	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R1044	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R1045	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R1046	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R1047	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R1048	1-216-837-11	s	RESISTOR,CHIP 22K 1/16W 1608
R1050	1-216-864-11	s	CONDUCTOR, CHIP (1608)

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R1052	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R1053	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R1056	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R1061	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R1062	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R1068	1-216-838-11	s	RESISTOR CHIP 27K 1/10W(1608)
R1069	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R1072	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R1073	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R1210	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R1218	1-218-740-11	s	RESISTOR,CHIP 100K 1/16W(1608)
R1223	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R1224	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R1225	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R1226	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R1227	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R1228	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R7002	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R7005	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R7006	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R7007	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R7008	1-218-692-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R7009	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R7010	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R7011	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R7015	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R7063	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R7064	1-218-853-11	s	RESISTOR,CHIP 1.8K 1/10W(1608)
R7066	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R7067	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R7068	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R7069	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R7070	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R7071	1-218-853-11	s	RESISTOR,CHIP 1.8K 1/10W(1608)
R7072	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R7073	1-218-853-11	s	RESISTOR,CHIP 1.8K 1/10W(1608)
R7074	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R7075	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R7186	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R7190	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R7191	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R7200	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R7202	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R7203	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R7222	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R7223	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R7224	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R7225	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R7237	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R7239	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R7257	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R7258	1-216-815-11	s	RESISTOR,CHIP 330 1/10W 1608
R7259	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R7273	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R7279	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R7285	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R7287	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R7288	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R7290	1-216-864-11	s	CONDUCTOR, CHIP (1608)

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description	
R7291	1-216-864-11	s	CONDUCTOR, CHIP (1608)	
R7292	1-216-864-11	s	CONDUCTOR, CHIP (1608)	
R7294	1-216-864-11	s	CONDUCTOR, CHIP (1608)	
R7295	1-216-864-11	s	CONDUCTOR, CHIP (1608)	
RB201	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB202	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB203	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB204	1-234-375-21	s	RES, NETWORK 1KX4	(1005)
RB205	1-234-375-21	s	RES, NETWORK 1KX4	(1005)
RB206	1-234-375-21	s	RES, NETWORK 1KX4	(1005)
RB401	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB402	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB403	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB404	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB405	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB406	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB407	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB408	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB409	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB410	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB411	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB412	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB601	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB602	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB603	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB604	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB605	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB606	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB607	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB608	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB609	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB610	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB611	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB612	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB801	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB802	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB803	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB804	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB805	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB806	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB807	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB1001	1-234-369-21	s	RES, NETWORK 10X4	(1005)
RB1002	1-234-369-21	s	RES, NETWORK 10X4	(1005)
RB1003	1-234-369-21	s	RES, NETWORK 10X4	(1005)
RB1004	1-234-369-21	s	RES, NETWORK 10X4	(1005)
RB1005	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB1006	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB1007	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB1008	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB1009	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB1010	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB1011	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB1012	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB1013	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB1014	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB1211	1-234-371-11	s	RES, NETWORK 47X4	(1005)
RB1212	1-234-371-11	s	RES, NETWORK 47X4	(1005)
TH401	1-809-350-21	s	THERMISTOR	

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
TP1	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP2	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP3	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP4	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP5	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP6	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP7	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP8	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP9	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP201	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP202	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP401	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP402	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP403	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP608	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP609	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP611	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP612	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP613	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP614	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP615	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP801	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP802	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP803	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP804	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
TP805	1-535-757-11	s	CHIP, CHECKER (CONNECTOR)
X1	1-781-914-21	s	VIBRATOR, CRYSTAL
X2	1-760-502-11	s	VIBRATOR, CRYSTAL
X601	1-795-283-22	s	OSCILLATOR, CRYSTAL
X801	1-781-579-21	s	OSCILLATOR, CRYSTAL
X802	1-767-365-21	s	OSCILLATOR, CRYSTAL
X1001	1-579-886-11	s	VIBRATOR, CRYSTAL
X1002	1-781-659-11	s	VIBRATOR, CRYSTAL

H1 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-1062-628-A	o	MOUNTED CIRCUIT BOARD, H1
C9300	1-126-205-11	s	CAPACITOR,ELECT 47MF/6.3
C9301	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
CN8551	1-580-756-21	s	PIN, CONNECTOR 7P
D9300	8-719-069-55	s	DIODE UDZS-TE17-5.6B
D9301	8-719-069-55	s	DIODE UDZS-TE17-5.6B
D9306	8-719-073-01	s	DIODE MA111-(K8).S0
D9307	8-719-073-01	s	DIODE MA111-(K8).S0
D9308	6-500-470-11	s	DIODE BRPG1211C-34-TR
D9309	8-719-073-01	s	DIODE MA111-(K8).S0
D9310	8-719-073-01	s	DIODE MA111-(K8).S0
IC9300	8-759-177-23	s	IC RS-50-T
Q9300	8-729-907-00	s	TRANSISTOR DTC114EU
Q9301	8-729-907-00	s	TRANSISTOR DTC114EU
R9300	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R9302	1-216-813-11	s	RESISTOR, CHIP 220 1/10W 1608
R9304	1-216-808-11	s	RESISTOR,CHIP 82 1/16W 1608
R9305	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R9306	1-216-864-11	s	CONDUCTOR, CHIP (1608)

H2 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-1062-794-A	o	MOUNTED CIRCUIT BOARD, H2
C8651	1-115-566-11	s	CAPACITOR,CERAMIC 4.7MF B/6.3V
C8652	1-162-915-11	s	CAPACITOR,CERAMIC 10PF/50V CH
CN8651	1-794-848-21	o	CONNECTOR,BOARD TO CABLE(4 PIN
R8651	1-216-839-11	s	RESISTOR,CHIP 33K 1/10W 1608
R8652	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R8653	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R8654	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R8655	1-216-826-11	s	RESISTOR,CHIP 2.7K 1/10W(1608)
R8656	1-218-853-11	s	RESISTOR,CHIP 1.8K 1/10W(1608)
S8651	1-692-829-11	s	SWITCH, TACTILE
S8652	1-692-829-11	s	SWITCH, TACTILE
S8653	1-692-829-11	s	SWITCH, TACTILE
S8654	1-692-829-11	s	SWITCH, TACTILE
S8657	1-692-829-11	s	SWITCH, TACTILE

Q BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-1062-627-A	o	MOUNTED CIRCUIT BOARD, Q
C3003	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C3004	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C3005	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C3006	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C3007	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C3008	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C3009	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C3010	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C3011	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C3012	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C3013	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C3014	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C3015	1-127-692-11	s	CAP, CHIP CERAMIC 10MF B 3216
C3016	1-115-459-11	s	CAPACITOR,ELECT 47MF/6.3V(BP)
C3017	1-115-459-11	s	CAPACITOR,ELECT 47MF/6.3V(BP)
C3018	1-127-692-11	s	CAP, CHIP CERAMIC 10MF B 3216
C3019	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3020	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3021	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3022	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3023	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3024	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3033	1-126-205-11	s	CAPACITOR,ELECT 47MF/6.3
C3034	1-126-205-11	s	CAPACITOR,ELECT 47MF/6.3
C3035	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3036	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3037	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3038	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3039	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3040	1-126-205-11	s	CAPACITOR,ELECT 47MF/6.3
C3041	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3042	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3043	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3044	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3045	1-126-205-11	s	CAPACITOR,ELECT 47MF/6.3
C3046	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C3047	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C3048	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C3049	1-162-923-11	s	CAPACITOR,CERAMIC 47PF/50V CH
C3050	1-162-923-11	s	CAPACITOR,CERAMIC 47PF/50V CH
C3051	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C3052	1-162-923-11	s	CAPACITOR,CERAMIC 47PF/50V CH
C3053	1-162-923-11	s	CAPACITOR,CERAMIC 47PF/50V CH
C3054	1-162-923-11	s	CAPACITOR,CERAMIC 47PF/50V CH
C3055	1-162-923-11	s	CAPACITOR,CERAMIC 47PF/50V CH
C3056	1-126-205-11	s	CAPACITOR,ELECT 47MF/6.3
C3057	1-126-205-11	s	CAPACITOR,ELECT 47MF/6.3
C3058	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C3059	1-126-205-11	s	CAPACITOR,ELECT 47MF/6.3
C3060	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C3061	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3062	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3063	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3064	1-162-964-11	s	CAPACITOR,CERAMIC 1000PF/50V B
C3065	1-162-964-11	s	CAPACITOR,CERAMIC 1000PF/50V B
C3066	1-162-964-11	s	CAPACITOR,CERAMIC 1000PF/50V B
C3067	1-162-964-11	s	CAPACITOR,CERAMIC 1000PF/50V B

(Q BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C3068	1-162-964-11	s	CAPACITOR,CERAMIC 1000PF/50V B
C3069	1-162-964-11	s	CAPACITOR,CERAMIC 1000PF/50V B
C3070	1-126-205-11	s	CAPACITOR,ELECT 47MF/6.3
C3072	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3074	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3076	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3077	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3078	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C3079	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3080	1-126-205-11	s	CAPACITOR,ELECT 47MF/6.3
C3081	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3082	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3083	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3084	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3085	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3086	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3087	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3088	1-165-176-11	s	CAPACITOR,CERAMIC 47000PF/16V
C3089	1-165-176-11	s	CAPACITOR,CERAMIC 47000PF/16V
C3090	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3091	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C3092	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C3093	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C3094	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C3095	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3096	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C3097	1-126-395-11	s	CAPACITOR,ELECT 22MF/16V(CHIP)
C3098	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3099	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3100	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C3101	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3102	1-104-661-91	s	CAPACITOR, ELECT 330MF/16V
C3103	1-104-661-91	s	CAPACITOR, ELECT 330MF/16V
C3104	1-104-661-91	s	CAPACITOR, ELECT 330MF/16V
C3105	1-104-661-91	s	CAPACITOR, ELECT 330MF/16V
C3106	1-104-661-91	s	CAPACITOR, ELECT 330MF/16V
C3107	1-104-661-91	s	CAPACITOR, ELECT 330MF/16V
C3108	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C3109	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C3110	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3111	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C3112	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C3113	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3114	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C3115	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C3116	1-126-205-11	s	CAPACITOR,ELECT 47MF/6.3
C3117	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C3118	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C3119	1-162-587-11	s	CAPACITOR,CHIP CERAMIC 0.039MF
C3120	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C3121	1-127-573-11	s	CAPACITOR,CERAMIC 1MFB(2012)
C3122	1-127-573-11	s	CAPACITOR,CERAMIC 1MFB(2012)
C3123	1-162-587-11	s	CAPACITOR,CHIP CERAMIC 0.039MF
C3124	1-162-587-11	s	CAPACITOR,CHIP CERAMIC 0.039MF
C3125	1-126-602-11	s	CAPACITOR,ELECT 3.3MF/50V(CHIP
C3126	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C3127	1-163-135-00	s	CAPACITOR,CHIP CERAMIC 560PF
C3128	1-127-573-11	s	CAPACITOR,CERAMIC 1MFB(2012)
C3129	1-127-573-11	s	CAPACITOR,CERAMIC 1MFB(2012)

(Q BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C3130	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C3131	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C3132	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C3133	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C3134	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3135	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3136	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C3137	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C3138	1-162-968-11	s	CAPACITOR,CERAMIC 4700PF/50V B
C3139	1-162-968-11	s	CAPACITOR,CERAMIC 4700PF/50V B
C3140	1-115-416-11	s	CAPACITOR,CERAMIC 1000PF/25V
C3141	1-115-416-11	s	CAPACITOR,CERAMIC 1000PF/25V
C3142	1-164-505-11	s	CAPACITOR,CHIP CERAMIC 2.2MF
C3143	1-164-505-11	s	CAPACITOR,CHIP CERAMIC 2.2MF
C3144	1-162-927-11	s	CAPACITOR,CERAMIC 100PF/50V CH
C3145	1-162-927-11	s	CAPACITOR,CERAMIC 100PF/50V CH
C3147	1-107-884-11	s	CAPACITOR,ELECT 1000MF/16V
C3148	1-107-884-11	s	CAPACITOR,ELECT 1000MF/16V
C3150	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3151	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3152	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3153	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3154	1-115-339-11	s	CAPACITOR,CERAMIC 0.1MF/50V
C3155	1-115-339-11	s	CAPACITOR,CERAMIC 0.1MF/50V
C3157	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3158	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3159	1-107-884-11	s	CAPACITOR,ELECT 1000MF/16V
C3160	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3161	1-107-884-11	s	CAPACITOR,ELECT 1000MF/16V
C3162	1-126-395-11	s	CAPACITOR,ELECT 22MF/16V(CHIP)
C3163	1-104-661-91	s	CAPACITOR, ELECT 330MF/16V
C3164	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3165	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C3166	1-163-135-00	s	CAPACITOR,CHIP CERAMIC 560PF
C3167	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3168	1-163-135-00	s	CAPACITOR,CHIP CERAMIC 560PF
C3169	1-137-980-91	s	CAPACITOR,CHIP CERAMIC 0.47MF
C3170	1-137-980-91	s	CAPACITOR,CHIP CERAMIC 0.47MF
C3171	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C3172	1-137-980-91	s	CAPACITOR,CHIP CERAMIC 0.47MF
C3173	1-137-980-91	s	CAPACITOR,CHIP CERAMIC 0.47MF
C3174	1-126-395-11	s	CAPACITOR,ELECT 22MF/16V(CHIP)
C3175	1-137-980-91	s	CAPACITOR,CHIP CERAMIC 0.47MF
C3176	1-137-980-91	s	CAPACITOR,CHIP CERAMIC 0.47MF
C3177	1-137-980-91	s	CAPACITOR,CHIP CERAMIC 0.47MF
C3178	1-137-980-91	s	CAPACITOR,CHIP CERAMIC 0.47MF
C3179	1-137-980-91	s	CAPACITOR,CHIP CERAMIC 0.47MF
C3180	1-137-980-91	s	CAPACITOR,CHIP CERAMIC 0.47MF
C3181	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C3182	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C3183	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3184	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C3185	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3186	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3187	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3188	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3189	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3190	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3191	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF

(Q BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C3192	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3197	1-126-205-11	s	CAPACITOR,ELECT 47MF/6.3
C3198	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3199	1-126-205-11	s	CAPACITOR,ELECT 47MF/6.3
C3200	1-126-205-11	s	CAPACITOR,ELECT 47MF/6.3
C3201	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3202	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3203	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3204	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3205	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3206	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3207	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3208	1-124-778-00	s	CAPACITOR,ELECT 22MF/6.3V
C3209	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C3210	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C3211	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C3212	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C3213	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C3214	1-127-573-11	s	CAPACITOR,CERAMIC 1MFB(2012)
C3215	1-127-573-11	s	CAPACITOR,CERAMIC 1MFB(2012)
C3216	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C3217	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C3218	1-126-205-11	s	CAPACITOR,ELECT 47MF/6.3
C3219	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C3220	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C3221	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C3222	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C3223	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C3224	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C3225	1-104-661-91	s	CAPACITOR, ELECT 330MF/16V
C3226	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3227	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3228	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C3229	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
CLP302	4-042-408-02	o	PIN, COATING LEAD
CLP303	4-042-408-02	o	PIN, COATING LEAD
CLP305	4-042-408-02	o	PIN, COATING LEAD
CN3001	1-764-095-11	o	PIN, CONNECTOR (PC BOARD) 10P
CN3002	1-784-625-11	o	CONNECTOR, FFC (ZIF) 30P
CN3004	1-764-080-21	o	PIN, CONNECTOR (PC BOARD) 8P
CN3005	1-564-528-11	s	PLUG,CONNECTOR (13P)(L-TYPE)
CN3006	1-779-992-11	s	PIN, CONNECTOR (PWB) 8P
CN3007	1-695-210-21	o	PIN, CONNECTOR (PC BOARD) 15P
CN3008	1-568-942-11	o	PIN,CONECTOR (4P)
CN3011	1-764-090-11	o	PIN, CONNECTOR (PC BOARD) 5P
CN3012	1-764-094-21	o	PIN, CONNECTOR (PC BOARD) 9P
CN3014	1-564-509-11	o	PLUG,CONNECTOR (6P)
CN3015	1-564-509-11	o	PLUG,CONNECTOR (6P)
D3005	8-719-069-55	s	DIODE UDZS-TE17-5.6B
D3006	8-719-069-55	s	DIODE UDZS-TE17-5.6B
D3007	8-719-069-55	s	DIODE UDZS-TE17-5.6B
D3008	8-719-069-55	s	DIODE UDZS-TE17-5.6B
D3009	8-719-800-76	s	DIODE 1SS226
D3010	8-719-800-76	s	DIODE 1SS226
D3011	8-719-800-76	s	DIODE 1SS226
D3012	8-719-800-76	s	DIODE 1SS226
D3013	8-719-800-76	s	DIODE 1SS226
D3014	8-719-800-76	s	DIODE 1SS226

(Q BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
D3015	8-719-083-82	s	DIODE UDZS-TE17-12B
D3016	8-719-083-82	s	DIODE UDZS-TE17-12B
D3017	8-719-083-82	s	DIODE UDZS-TE17-12B
D3018	8-719-083-82	s	DIODE UDZS-TE17-12B
D3019	8-719-921-40	s	DIODE MTZJ4.7C
D3020	8-719-921-40	s	DIODE MTZJ4.7C
D3021	8-719-083-60	s	DIODE UDZSTE-174.7B
D3022	8-719-083-60	s	DIODE UDZSTE-174.7B
D3023	8-719-921-40	s	DIODE MTZJ4.7C
D3024	8-719-921-40	s	DIODE MTZJ4.7C
D3025	8-719-083-60	s	DIODE UDZSTE-174.7B
D3026	8-719-083-60	s	DIODE UDZSTE-174.7B
D3027	8-719-036-94	s	DIODE RD5.6SB-T1
D3028	8-719-059-22	s	DIODE NSQ03A06-TE16L
D3029	8-719-921-40	s	DIODE MTZJ4.7C
D3035	8-719-977-28	s	DIODE DTZ10B
D3036	8-719-977-28	s	DIODE DTZ10B
D3037	8-719-977-28	s	DIODE DTZ10B
D3038	8-719-977-28	s	DIODE DTZ10B
D3042	8-719-073-01	s	DIODE MA111-(K8).S0
D3043	8-719-041-97	s	DIODE MA113-TX
D3044	8-719-991-00	s	DIODE DAP222
D3048	8-719-025-47	s	DIODE 02CZ12-TE85L
D3049	8-719-025-47	s	DIODE 02CZ12-TE85L
D3050	8-719-025-47	s	DIODE 02CZ12-TE85L
D3051	8-719-025-47	s	DIODE 02CZ12-TE85L
D3052	8-719-069-55	s	DIODE UDZS-TE17-5.6B
D3053	8-719-069-55	s	DIODE UDZS-TE17-5.6B
D3054	8-719-025-47	s	DIODE 02CZ12-TE85L
D3055	8-719-025-47	s	DIODE 02CZ12-TE85L
D3056	8-719-025-47	s	DIODE 02CZ12-TE85L
D3057	8-719-025-47	s	DIODE 02CZ12-TE85L
D3060	8-719-977-28	s	DIODE DTZ10B
D3061	8-719-977-28	s	DIODE DTZ10B
D3062	8-719-056-23	s	DIODE MA2S111-(K8)
D3063	8-719-083-87	s	DIODE UDZSTE-1733B
D3064	8-719-083-87	s	DIODE UDZSTE-1733B
D3065	8-719-083-87	s	DIODE UDZSTE-1733B
D3066	8-719-083-87	s	DIODE UDZSTE-1733B
D3067	8-719-083-82	s	DIODE UDZS-TE17-12B
D3068	8-719-801-78	s	DIODE 1SS184
D3069	8-719-069-55	s	DIODE UDZS-TE17-5.6B
D3070	8-719-801-78	s	DIODE 1SS184
D3071	8-719-069-55	s	DIODE UDZS-TE17-5.6B
F3001 ⚠	1-576-788-21	s	FUSE 5A 72V
F3002 ⚠	1-576-788-21	s	FUSE 5A 72V
F3004 ⚠	1-576-604-11	s	FUSE 1A 72V
F3005 ⚠	1-576-604-11	s	FUSE 1A 72V
F3006 ⚠	1-576-775-21	s	FUSE (2A) 72V
FB3001	1-469-407-22	s	INDUCTOR, FERRITE BEAD
FB3002	1-414-234-11	s	INDUCTOR,FERRITE BEAD
FB3003	1-414-234-11	s	INDUCTOR,FERRITE BEAD
FB3004	1-414-234-11	s	INDUCTOR,FERRITE BEAD
FB3005	1-414-234-11	s	INDUCTOR,FERRITE BEAD
FB3006	1-414-234-11	s	INDUCTOR,FERRITE BEAD
FB3007	1-410-396-41	s	FERRITE BEAD INDUCTOR (0.45UH)
FB3012	1-400-392-21	s	INDUCTOR, FERRITE BEAD
FB3013	1-400-392-21	s	INDUCTOR, FERRITE BEAD
FB3029	1-216-864-11	s	CONDUCTOR, CHIP (1608)

(Q BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
FB3030	1-216-864-11	s	CONDUCTOR, CHIP (1608)
FB3031	1-216-864-11	s	CONDUCTOR, CHIP (1608)
FB3032	1-216-864-11	s	CONDUCTOR, CHIP (1608)
FB3033	1-216-864-11	s	CONDUCTOR, CHIP (1608)
FB3034	1-216-864-11	s	CONDUCTOR, CHIP (1608)
IC3001	8-759-697-54	s	IC BR24C21F-E2
IC3002	8-759-697-54	s	IC BR24C21F-E2
IC3003	8-759-541-25	s	IC M52758FP
IC3004	8-759-541-25	s	IC M52758FP
IC3005	8-759-011-64	s	IC MC74HC4052F
IC3006	8-759-541-25	s	IC M52758FP
IC3007	8-759-700-07	s	IC NJM2903M
IC3008	8-759-460-81	s	IC BA12FP-E2
IC3009	8-759-011-64	s	IC MC74HC4052F
IC3010	6-700-571-01	s	IC TK15452V
IC3011	8-759-331-71	s	IC NJM4558E (TE2)
IC3012	8-759-172-60	s	IC TA8776N
IC3014	6-700-481-01	s	IC TDA7480
IC3015	6-700-481-01	s	IC TDA7480
IC3016	8-759-335-28	s	IC TA78M09F (TE16L)
IC3017	8-759-232-44	s	IC TC74HC125AF
IC3018	8-759-252-59	s	IC MAX202CSE
IC3019	8-759-439-67	s	IC TC7W126FU(TE12R)
IC3020	8-759-327-60	s	IC TC7W125FU-TE12R
IC3022	8-759-351-01	s	IC TEA6422DT
IC3023	8-759-673-52	s	IC MM74HC32MTCX
IC3024	8-759-669-50	s	IC SN74CBTD3306PWR-12
IC3025	8-759-669-50	s	IC SN74CBTD3306PWR-12
IC3026	8-759-669-50	s	IC SN74CBTD3306PWR-12
IC3027	8-759-232-44	s	IC TC74HC125AF
J3001	1-793-183-11	s	CONNECTOR, D SUB 15P
J3002	1-793-183-11	s	CONNECTOR, D SUB 15P
J3003	1-566-822-21	s	JACK
J3004	1-566-822-21	s	JACK
J3005	1-563-330-11	s	JACK (3.5MM)
J3006	1-563-330-11	s	JACK (3.5MM)
J3007	1-565-269-31	s	SOCKET,CONNECTOR(D-DUB,L)9P
JR3002	1-216-295-91	s	CONDUCTOR, CHIP (2012)
L3001	1-406-666-21	s	COIL, CHOKE 150UH
L3002	1-406-666-21	s	COIL, CHOKE 150UH
L3003	1-412-029-11	s	CHIP INDUCTOR 10UH (3225)
L3004	1-416-857-11	s	COIL, CHOKE (TROIDAL) 65UH
L3005	1-416-857-11	s	COIL, CHOKE (TROIDAL) 65UH
L3006	1-412-029-11	s	CHIP INDUCTOR 10UH (3225)
PS3000 ⚠	1-576-122-21	s	CIRCUIT PROTECTOR 0.4A(IC LINK
PS3001 ⚠	1-576-122-21	s	CIRCUIT PROTECTOR 0.4A(IC LINK
Q3001	6-550-014-01	s	TRANSISTOR SSM6N15FU(TE85R)
Q3002	6-550-014-01	s	TRANSISTOR SSM6N15FU(TE85R)
Q3003	8-729-112-48	s	TRANSISTOR 2SA1462-T1Y33
Q3004	8-729-112-48	s	TRANSISTOR 2SA1462-T1Y33
Q3005	8-729-112-48	s	TRANSISTOR 2SA1462-T1Y33
Q3006	8-729-928-81	s	TRANSISTOR DTC144EE
Q3009	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q3010	8-729-927-99	s	TRANSISTOR 2SC4617R
Q3011	8-729-041-37	s	TRANSISTOR 2SJ377(TE16L)
Q3017	8-729-928-81	s	TRANSISTOR DTC144EE

(Q BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
Q3019	8-729-216-22	s	TRANSISTOR 2SA1162-G
Q3021	8-729-928-81	s	TRANSISTOR DTC144EE
Q3024	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3025	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3029	8-729-928-81	s	TRANSISTOR DTC144EE
Q3030	8-729-927-99	s	TRANSISTOR 2SC4617R
Q3032	8-729-928-27	s	TRANSISTOR DTA144EE
R3001	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3002	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R3003	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3004	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3005	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R3006	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3007	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3008	1-218-666-11	s	RESISTOR,CHIP 82 1/16W (1608)
R3009	1-218-666-11	s	RESISTOR,CHIP 82 1/16W (1608)
R3010	1-218-666-11	s	RESISTOR,CHIP 82 1/16W (1608)
R3011	1-218-666-11	s	RESISTOR,CHIP 82 1/16W (1608)
R3012	1-218-666-11	s	RESISTOR,CHIP 82 1/16W (1608)
R3013	1-218-666-11	s	RESISTOR,CHIP 82 1/16W (1608)
R3014	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3015	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3016	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3017	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3018	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3019	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R3020	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R3021	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R3022	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R3023	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3024	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3025	1-216-813-11	s	RESISTOR, CHIP 220 1/10W 1608
R3026	1-216-813-11	s	RESISTOR, CHIP 220 1/10W 1608
R3027	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3028	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3029	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3030	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3031	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3032	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3033	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3034	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3035	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3036	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3038	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3039	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3041	1-216-811-11	s	RESISTOR, CHIP 150 1/16W(1608)
R3042	1-216-811-11	s	RESISTOR, CHIP 150 1/16W(1608)
R3043	1-216-811-11	s	RESISTOR, CHIP 150 1/16W(1608)
R3044	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R3045	1-216-811-11	s	RESISTOR, CHIP 150 1/16W(1608)
R3046	1-216-811-11	s	RESISTOR, CHIP 150 1/16W(1608)
R3047	1-216-811-11	s	RESISTOR, CHIP 150 1/16W(1608)
R3048	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R3049	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3050	1-216-817-11	s	RESISTOR,CHIP 470 1/10W 1608
R3051	1-216-817-11	s	RESISTOR,CHIP 470 1/10W 1608
R3052	1-216-817-11	s	RESISTOR,CHIP 470 1/10W 1608
R3053	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608

(Q BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R3054	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3055	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3056	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3057	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3058	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3059	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3060	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3061	1-216-819-11	s	RESISTOR,CHIP 680 1/10W 1608
R3062	1-216-819-11	s	RESISTOR,CHIP 680 1/10W 1608
R3063	1-216-819-11	s	RESISTOR,CHIP 680 1/10W 1608
R3064	1-216-837-11	s	RESISTOR,CHIP 22K 1/16W 1608
R3065	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R3066	1-216-836-11	s	RESISTOR, CHIP 18K 1/10W 1608
R3067	1-216-832-11	s	RESISTOR,CHIP 8.2K 1/16W 1608
R3068	1-216-839-11	s	RESISTOR,CHIP 33K 1/10W 1608
R3069	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R3070	1-216-826-11	s	RESISTOR,CHIP 2.7K 1/10W(1608)
R3072	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R3073	1-249-381-11	s	RES,CARBON 1 (1/4W)
R3074	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R3075	1-216-797-11	s	RESISTOR,CHIP 10 1/10W 1608
R3076	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R3077	1-216-797-11	s	RESISTOR,CHIP 10 1/10W 1608
R3078	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R3079	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R3080	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R3081	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R3082	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R3083	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R3084	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R3085	1-216-849-11	s	RESISTOR,CHIP 220K 1/16W 1608
R3086	1-216-849-11	s	RESISTOR,CHIP 220K 1/16W 1608
R3087	1-216-849-11	s	RESISTOR,CHIP 220K 1/16W 1608
R3088	1-216-849-11	s	RESISTOR,CHIP 220K 1/16W 1608
R3089	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R3090	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R3091	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R3092	1-218-867-11	s	RESISTOR,CHIP 6.8K 1/10W(1608)
R3093	1-218-869-11	s	RESISTOR,CHIP 8.2K 1/10W(1608)
R3094	1-218-839-11	s	RESISTOR,CHIP 470 1/10W (1608)
R3095	1-218-825-11	s	RESISTOR,CHIP 120 1/10W (1608)
R3096	1-218-825-11	s	RESISTOR,CHIP 120 1/10W (1608)
R3097	1-218-839-11	s	RESISTOR,CHIP 470 1/10W (1608)
R3098	1-218-867-11	s	RESISTOR,CHIP 6.8K 1/10W(1608)
R3099	1-218-871-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R3100	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R3101	1-216-827-11	s	RESISTOR, CHIP 3.3K 1/10W 1608
R3102	1-216-830-11	s	RESISTOR,CHIP 5.6K 1/10W 1608
R3103	1-216-827-11	s	RESISTOR, CHIP 3.3K 1/10W 1608
R3104	1-216-830-11	s	RESISTOR,CHIP 5.6K 1/10W 1608
R3105	1-218-825-11	s	RESISTOR,CHIP 120 1/10W (1608)
R3106	1-218-839-11	s	RESISTOR,CHIP 470 1/10W (1608)
R3107	1-218-867-11	s	RESISTOR,CHIP 6.8K 1/10W(1608)
R3108	1-218-869-11	s	RESISTOR,CHIP 8.2K 1/10W(1608)
R3109	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R3110	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3111	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R3112	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R3113	1-216-826-11	s	RESISTOR,CHIP 2.7K 1/10W(1608)

(Q BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R3114	1-216-826-11	s	RESISTOR,CHIP 2.7K 1/10W(1608)
R3115	1-216-797-11	s	RESISTOR,CHIP 10 1/10W 1608
R3116	1-216-837-11	s	RESISTOR,CHIP 22K 1/16W 1608
R3117	1-216-837-11	s	RESISTOR,CHIP 22K 1/16W 1608
R3118	1-216-837-11	s	RESISTOR,CHIP 22K 1/16W 1608
R3119	1-216-837-11	s	RESISTOR,CHIP 22K 1/16W 1608
R3120	1-216-834-11	s	RESISTOR,CHIP 12K 1/16W 1608
R3121	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3122	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3123	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R3125	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R3126	1-216-837-11	s	RESISTOR,CHIP 22K 1/16W 1608
R3127	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R3128	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R3129	1-216-857-11	s	RESISTOR,CHIP 1M 1/10W(1608)
R3132	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R3133	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R3134	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R3135	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R3136	1-216-852-11	s	RESISTOR,CHIP 390K 1/16W 1608
R3137	1-216-839-11	s	RESISTOR,CHIP 33K 1/10W 1608
R3138	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R3139	1-216-839-11	s	RESISTOR,CHIP 33K 1/10W 1608
R3141	1-216-834-11	s	RESISTOR,CHIP 12K 1/16W 1608
R3142	1-216-832-11	s	RESISTOR,CHIP 8.2K 1/16W 1608
R3143	1-218-823-11	s	RESISTOR,CHIP 100 1/10W (1608)
R3144	1-218-823-11	s	RESISTOR,CHIP 100 1/10W (1608)
R3145	1-218-823-11	s	RESISTOR,CHIP 100 1/10W (1608)
R3146	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R3147	1-216-811-11	s	RESISTOR, CHIP 150 1/16W(1608)
R3148	1-216-811-11	s	RESISTOR, CHIP 150 1/16W(1608)
R3149	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R3150	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R3151	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R3152	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R3153	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R3154	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R3155	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R3156	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R3157	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R3158	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R3159	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R3160	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R3161	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R3162	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R3163	1-218-668-11	s	RESISTOR,CHIP 100 1/16W (1608)
R3164	1-218-668-11	s	RESISTOR,CHIP 100 1/16W (1608)
R3165	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R3168	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R3169	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R3170	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R3171	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R3172	1-216-797-11	s	RESISTOR,CHIP 10 1/10W 1608
R3173	1-216-797-11	s	RESISTOR,CHIP 10 1/10W 1608
R3183	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3184	1-216-797-11	s	RESISTOR,CHIP 10 1/10W 1608
R3185	1-216-797-11	s	RESISTOR,CHIP 10 1/10W 1608
R3186	1-216-797-11	s	RESISTOR,CHIP 10 1/10W 1608
R3187	1-216-797-11	s	RESISTOR,CHIP 10 1/10W 1608

(Q BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R3188	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R3189	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R3190	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R3191	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R3192	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R3193	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R3194	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R3195	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R3196	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R3197	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R3200	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R3201	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R3202	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R3203	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R3204	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R3205	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R3206	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3207	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3212	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R3213	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R3214	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R3215	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R3216	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R3217	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R3218	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3219	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3220	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3221	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3222	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3223	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3224	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3225	1-216-805-11	s	RESISTOR,CHIP 47 1/10W 1608
R3226	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3227	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3228	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3229	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3230	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3231	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3236	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3237	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3238	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3239	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3240	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3241	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R3242	1-216-864-11	s	CONDUCTOR, CHIP (1608)
S3001	1-553-510-11	s	SWITCH, SLIDE

S BOARD

Ref. No. or Q'ty	Part No.	SP	Description
3pcs	A-1068-935-A	o	MOUNTED CIRCUIT BOARD, S
C1501	1-126-392-11	s	CAPACITOR,CHIP ELECT100MF/6.3V
C1502	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C1503	1-127-573-11	s	CAPACITOR,CERAMIC 1MFB(2012)
C1504	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
CN1501	1-564-506-11	o	PLUG,CONNECTOR (3P)
IC1501	8-759-947-34	s	IC LM35DZ
IC1502	8-759-144-72	s	IC UPC358G2-E2
R1501	1-216-627-11	s	RESISTOR,CHIP 100 1/10W (2012)
R1502	1-216-659-11	s	RESISTOR,CHIP 2.2K 1/10W(2012)
R1503	1-216-671-11	s	RESISTOR,CHIP 6.8K 1/10W(2012)
R1504	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)

SP BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-1063-073-A	o	MOUNTED CIRCUIT BOARD, SP
CN9500	1-568-942-11	o	PIN,CONECTOR (4P)
FB9500	1-469-869-21	s	INDUCTOR (EMI FERRITE) (2012)
FB9501	1-469-869-21	s	INDUCTOR (EMI FERRITE) (2012)
FB9502	1-469-869-21	s	INDUCTOR (EMI FERRITE) (2012)
FB9503	1-469-869-21	s	INDUCTOR (EMI FERRITE) (2012)
FL9500	1-233-895-11	s	FILTER, EMI (ZJY51R5-4P)
TB9500	1-537-238-11	s	TERMINAL BOARD

U1 BOARD: FOR FWD-50PX1

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-1063-069-A	o	MOUNTED CIRCUIT BOARD, U1
C1	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C2	1-127-573-11	s	CAPACITOR,CERAMIC 1MFB(2012)
C3	1-128-994-11	s	CAP, ELECT 47MF/10V
C4	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5	1-128-994-11	s	CAP, ELECT 47MF/10V
C6	1-127-573-11	s	CAPACITOR,CERAMIC 1MFB(2012)
C7	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C8	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C10	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C12	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C13	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C19	1-125-891-11	s	CAPACITOR CERAMIC 0.47MF/10V
C21	1-127-715-11	s	CAPACITOR,CERAMIC 0.22MF B1608
C22	1-127-715-11	s	CAPACITOR,CERAMIC 0.22MF B1608
C23	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C24	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
CN1	1-793-303-11	o	CONNECTOR, ROUND TYPE (SVIDEO)
CN2	1-793-303-11	o	CONNECTOR, ROUND TYPE (SVIDEO)
CN3	1-794-223-11	o	CONNECTOR, BOARD TO BOARD 40P
D1	8-719-977-28	s	DIODE DTZ10B
D2	8-719-977-28	s	DIODE DTZ10B
D3	8-719-977-28	s	DIODE DTZ10B
D4	8-719-977-28	s	DIODE DTZ10B
D5	8-719-977-28	s	DIODE DTZ10B
D21	8-719-024-71	s	DIODE 1SS362-TE85L
D22	8-719-024-71	s	DIODE 1SS362-TE85L
D23	8-719-024-71	s	DIODE 1SS362-TE85L
FB1	1-414-445-11	s	FERRITE, EMI (SMD)
J2	1-794-623-11	s	JACK, PIN 2P
Q1	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q2	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q6	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q7	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
R1	1-218-285-11	s	RESISTOR,CHIP 75 1/16W (1608)
R2	1-218-285-11	s	RESISTOR,CHIP 75 1/16W (1608)
R3	1-218-285-11	s	RESISTOR,CHIP 75 1/16W (1608)
R4	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R6	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R7	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R8	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R9	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R10	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R11	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R12	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R13	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R14	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R16	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R18	1-216-853-11	s	RESISTOR,CHIP 470K 1/16W(1608)
R22	1-216-853-11	s	RESISTOR,CHIP 470K 1/16W(1608)
R23	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R24	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R25	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608

(U1 BOARD: FOR FWD-50PX1)

Ref. No. or Q'ty	Part No.	SP	Description
R26	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R27	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R28	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R29	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R30	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R31	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R32	1-216-827-11	s	RESISTOR, CHIP 3.3K 1/10W 1608
R33	1-216-815-11	s	RESISTOR,CHIP 330 1/10W 1608
R34	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R35	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R36	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R39	1-216-827-11	s	RESISTOR, CHIP 3.3K 1/10W 1608
R41	1-216-815-11	s	RESISTOR,CHIP 330 1/10W 1608
R42	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R43	1-216-815-11	s	RESISTOR,CHIP 330 1/10W 1608
R44	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R45	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R48	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R50	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R52	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R53	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R54	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R55	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R56	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R57	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R58	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R59	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R60	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R61	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R62	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
VDR1	1-803-974-11	s	VARISTOR, CHIP
VDR2	1-803-974-11	s	VARISTOR, CHIP
VDR3	1-803-974-11	s	VARISTOR, CHIP

FRAME

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-910-004-09	s	FFC CONNECTOR ASSY 30P
1pc	1-910-004-11	s	LVDS CONNECTOR ASSY 31P
1pc	1-910-008-13	s	CONNECTOR ASSY 12P
1pc	1-910-008-14	s	CONNECTOR ASSY (H1) 7P
1pc	1-910-008-59	s	10P DFCONNECTOR ASSY
1pc	1-910-008-60	s	MAIN HARNESS ASSY

6-4. Packing Materials & Supplied Accessories

PACKING MATERIALS & SUPPLIED ACCESSORIES

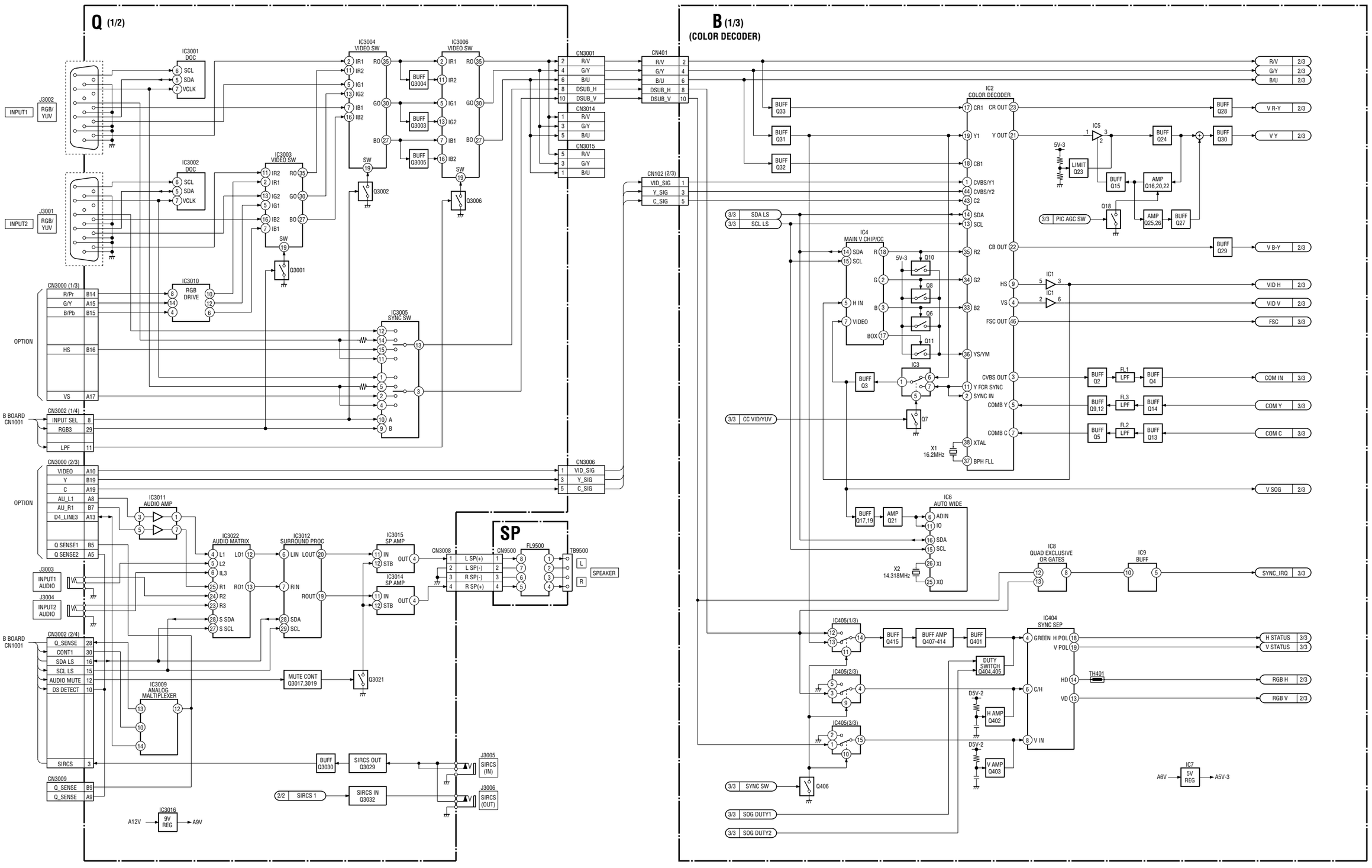
Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-478-917-11	s	REMOTE COMMANDER RM-980C
1pc	9-885-014-97	s	BATTERY COVER
6pcs	1-469-241-11	s	CORE, FERRITE (RFC-8 BK)
1pc	2-148-132-01	o	BAG, PROTECTION
1pc	2-176-804-01	s	MANUAL, INSTRUCTION (JAPANESE, ENGLISH, FRENCH, GERMAN, SPANISH, ITALIAN, SIMPLIFIED CHINESE)
6pcs	2-176-808-01	o	HOLDER,CABLE
1pc	2-348-601-01	s	MANUAL (MAIN), INSTRUCTION (CORE ATTACHING FOR HD15 AND AUDIO MINI JACK CABLE)
1pc	2-348-602-01	s	MANUAL (U1), INSTRUCTION (CORE ATTACHING FOR BKM-FW10 CABLE)
1pc	2-990-242-01	s	HOLDER (B),PLUG
1pc	3-613-640-01	o	HOLDER (C), PLUG
4pcs	3-674-673-01	o	STOPPER (A)
6pcs	3-701-748-00	s	HOLDER, WIRE
1pc	⚠ ----------		CORD, POWER (See 1-9.WARNING ON POWER CONNECTION)

6-5. SS-SP50FW

PACKING MATERIALS & SUPPLIED ACCESSORIES

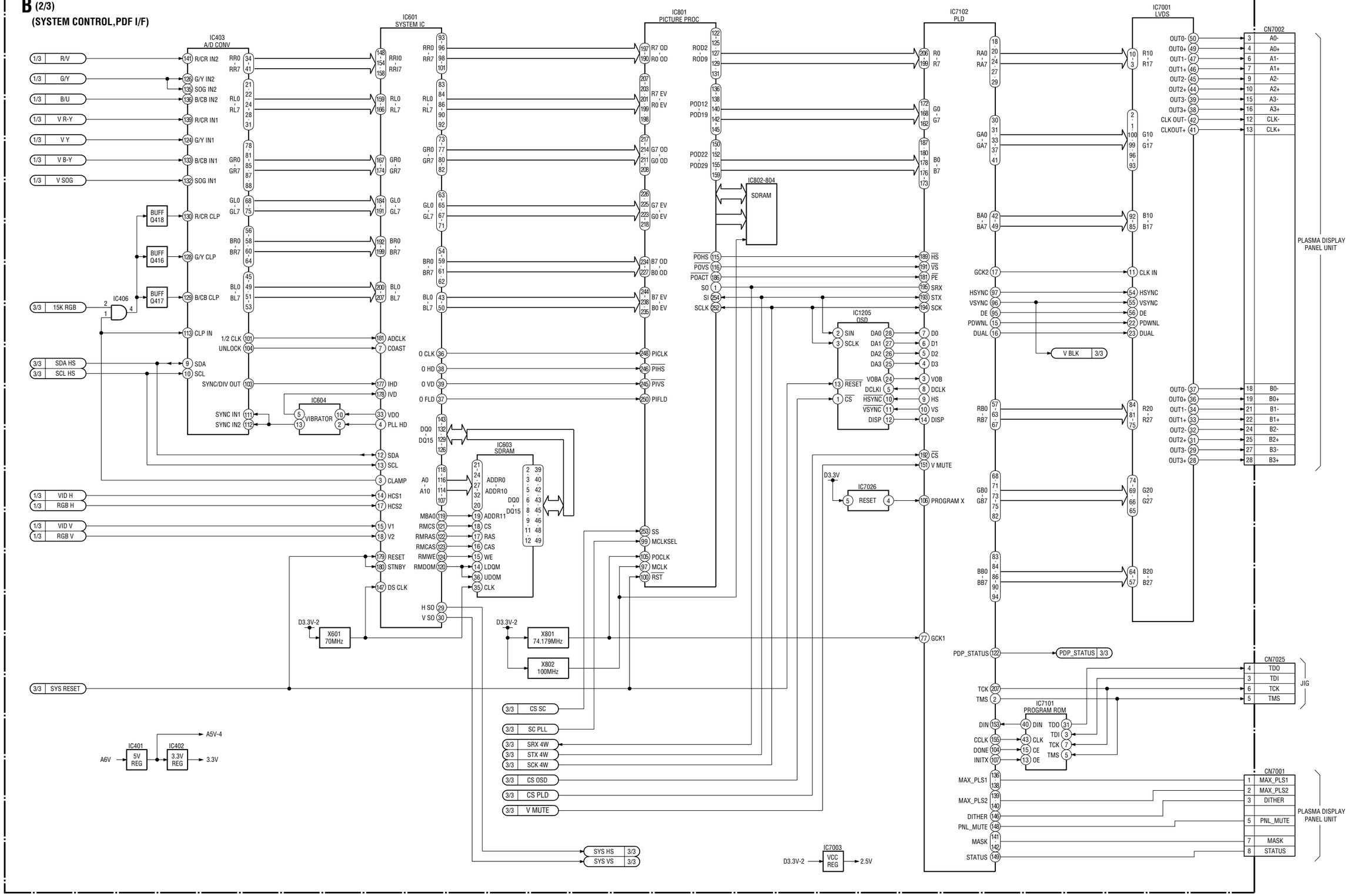
Ref. No. or Q'ty	Part No.	SP	Description
2pcs	2-176-597-01	o	COVER(50),TERMINAL
1pc	2-176-601-02	o	OPERATING,INSTRUCTIONS

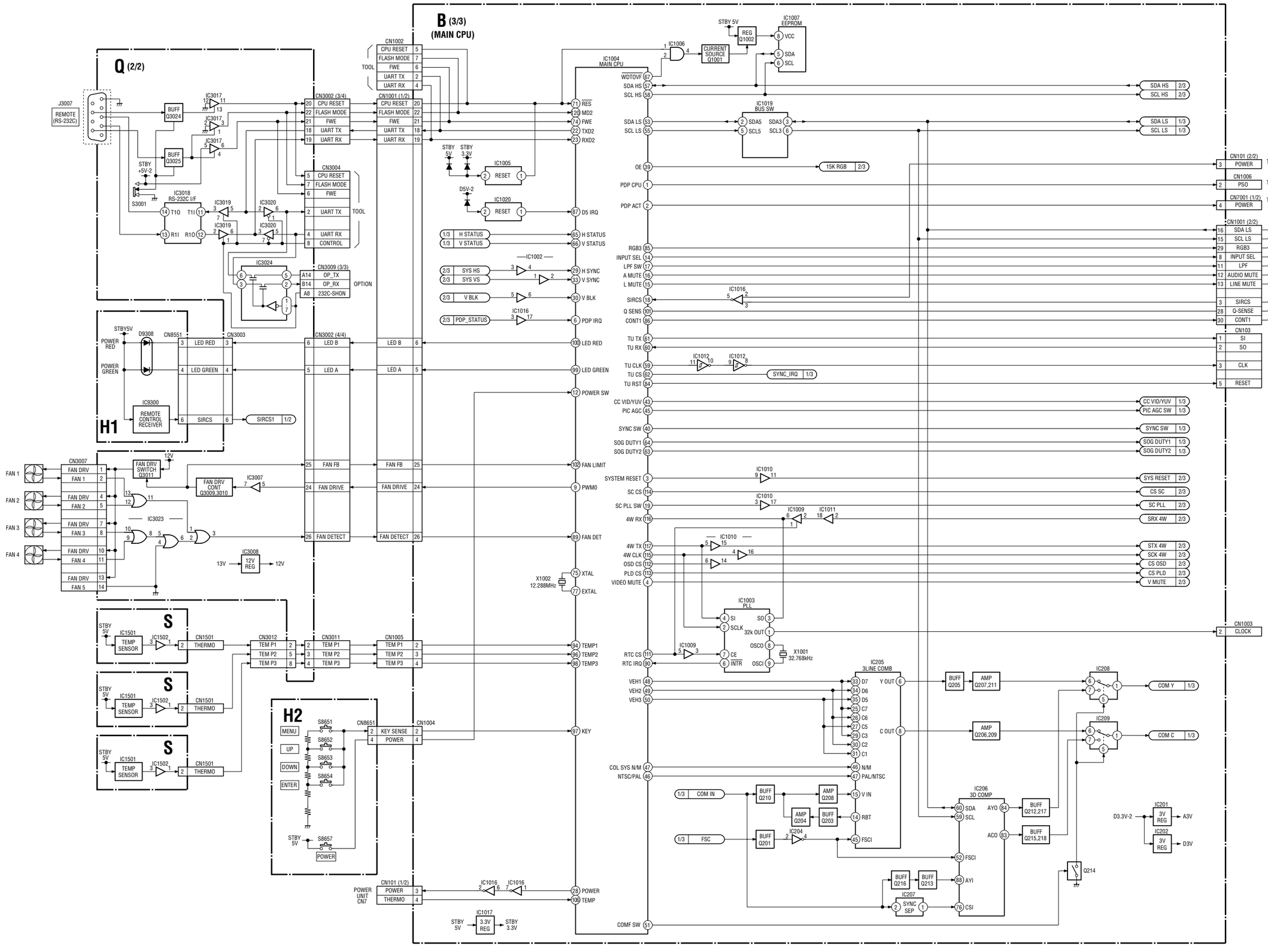
Section 7
Block Diagrams



B (2/3)

(SYSTEM CONTROL,PDF I/F)



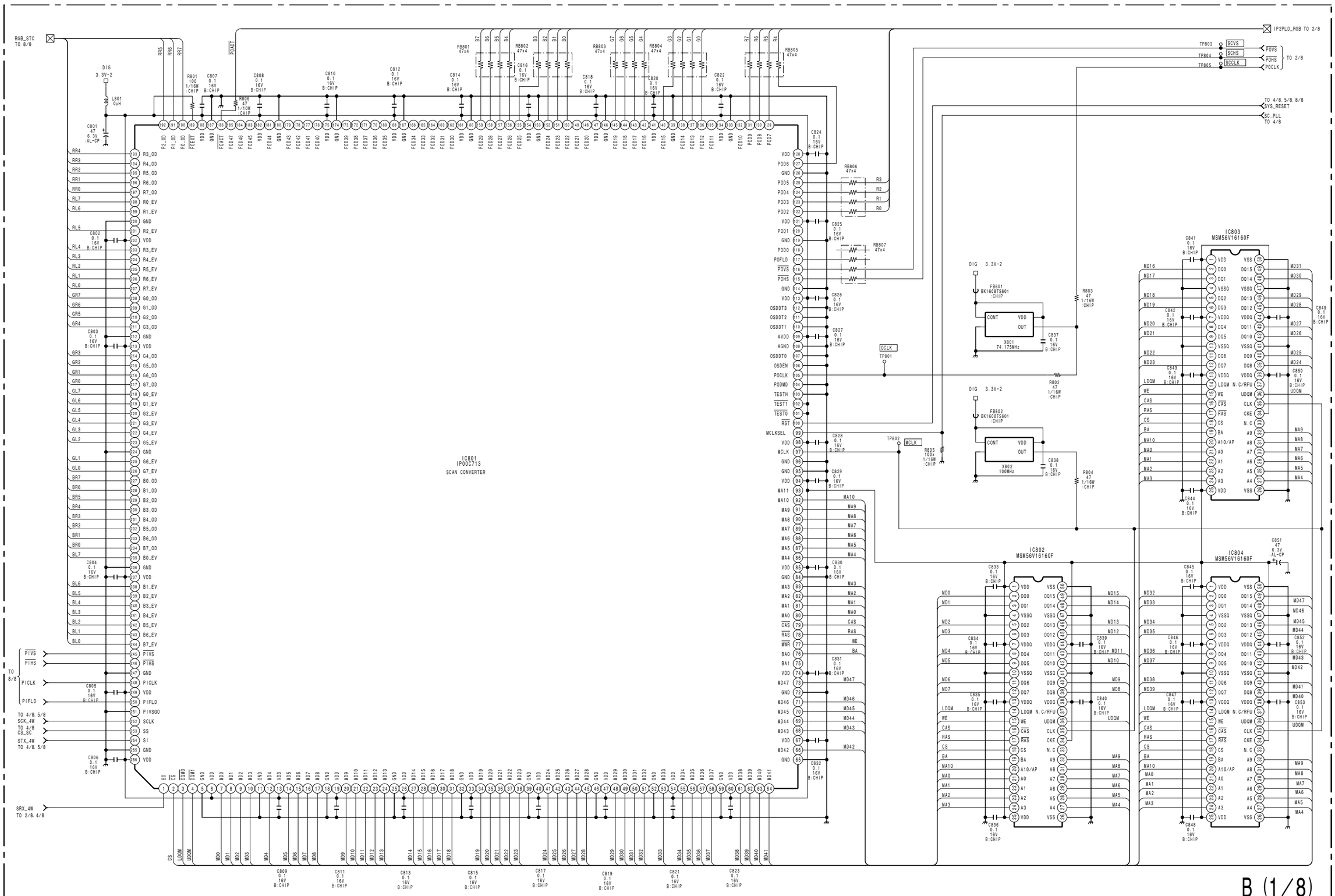

Q (2/2)
B (3/3)
(MAIN CPU)
H1
H2
S
J3007
REMOTE (RS-232C)
IC3004 RS-232C I/F
S3001
CN3002 (3/4)
CN1001 (1/2)
CN3004
CN3009 (3/3)
IC3024
CN1002
TOOL
OPTION
IC1004 MAIN CPU
IC1005 RESET
IC1020 RESET
IC1002
IC1016
IC1012
IC1007 EEPROM
REG Q1002
CURRENT SOURCE Q1001
IC1019 BUS SW
IC1010
IC1009
IC1011
IC1003 PLL
X1001 32.768kHz
X1002 12.288MHz
IC205 3LINE COMB
IC206 3D COMP
IC207 SYNC SEP
IC208
IC209
IC201 3V REG
IC202 3V REG
IC1008 12V REG
IC1017 3.3V REG
IC1501 TEMP SENSOR
IC1502
IC9300 REMOTE CONTROL RECEIVER
IC3007
IC3008
IC3017
IC3018 RS-232C I/F
IC3019
IC3020
IC3023
CN3007
CN3003
CN8551
CN3012
CN3011
CN1005
CN1501
CN1004
CN101 (1/2)
CN101 (2/2)
CN1006
CN7001 (1/2)
CN1001 (2/2)
CN103
CN1003
FAN DRV SWITCH Q3011
FAN DRV CONT Q3009,3010
BUFF Q3024
BUFF Q3025
STBY +5V-2
D5V-2
STBY 5V
STBY 3.3V
STBY5V
D9308
POWER RED
POWER GREEN
LED RED
LED GREEN
SIRCS1 1/2
FAN 1
FAN 2
FAN 3
FAN 4
FAN DRV
FAN FB
FAN DRIVE
FAN DETECT
12V
13V
CPU RESET
FLASH MODE
FWE
UART TX
UART RX
LED A
LED B
KEY SENSE
POWER
TEM P1
TEM P2
TEM P3
THERMO
MENU
UP
DOWN
ENTER
S8651
S8652
S8653
S8654
S8657
RES
MD2
TXD2
RXD2
D5 IRQ
H STATUS
V STATUS
H SYNC
V SYNC
V BLK
PDP IRQ
LED RED
LED GREEN
POWER SW
FAN LIMIT
PWM0
FAN DET
XTAL
EXTAL
TEMP1
TEMP2
TEMP3
KEY
POWER
TEMP
WDTOVF
SDA HS
SCL HS
SDA LS
SCL LS
OE
PDP CPU
PDP ACT
RGB3
INPUT SEL
LPF SW
A MUTE
L MUTE
SIRCS
Q SENS
CONT1
TU TX
TU RX
TU CLK
TU CS
TU RST
CC VID/YUV
PIC AGC
SYNC SW
SOG DUTY1
SOG DUTY2
SYSTEM RESET
SC CS
SC PLL SW
4W RX
4W TX
4W CLK
OSD CS
PLD CS
VIDEO MUTE
RTC CS
RTC IRQ
VEH1
VEH2
VEH3
COL SYS N/M
NTSC/PAL
COMF SW
15K RGB 2/3
SYNC_IRQ 1/3
SDA HS 2/3
SCL HS 2/3
SDA LS 1/3
SCL LS 1/3
CC VID/YUV 1/3
PIC AGC SW 1/3
SYNC SW 1/3
SOG DUTY1 1/3
SOG DUTY2 1/3
SYS RESET 2/3
CS SC 2/3
SC PLL 2/3
SRX 4W 2/3
STX 4W 2/3
SCK 4W 2/3
CS OSD 2/3
CS PLD 2/3
V MUTE 2/3
H STATUS 1/3
V STATUS 1/3
SYS HS 2/3
SYS VS 2/3
V BLK 2/3
PDP_STATUS 2/3
COM IN 1/3
FSC 1/3
COM Y 1/3
COM C 1/3
TO POWER UNIT CN7
TO POWER UNIT CN5
TO PLASMA DISPLAY PANEL UNIT CN7
Q BOARD CN3002
BUFF Q205
AMP Q207,211
AMP Q206,209
BUFF Q210
AMP Q208
AMP Q204
BUFF Q203
BUFF Q201
BUFF Q212,217
BUFF Q215,218
BUFF Q216
BUFF Q213
Q214
D3.3V-2
A3V
D3V

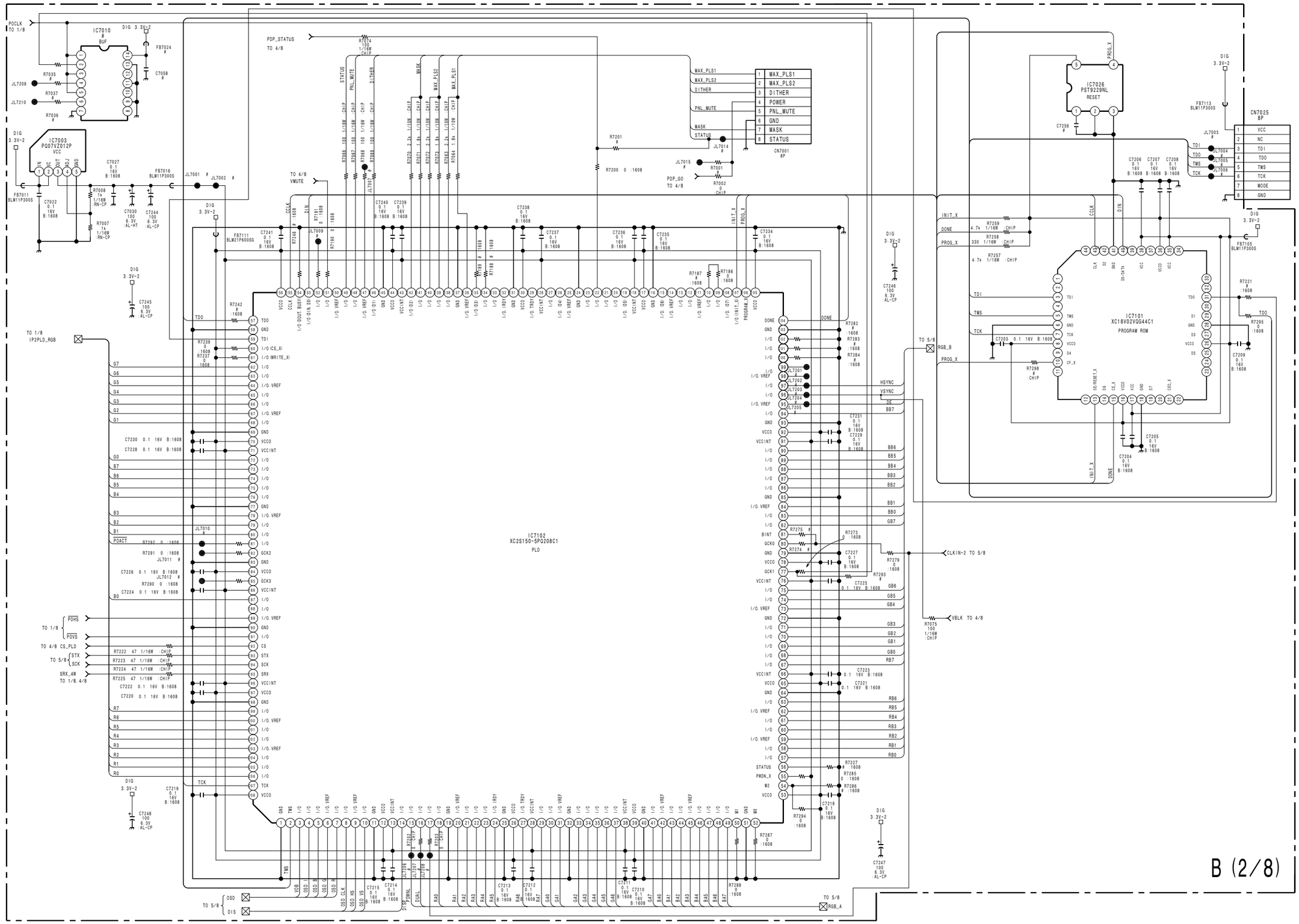
Section 8
Schematic Diagrams

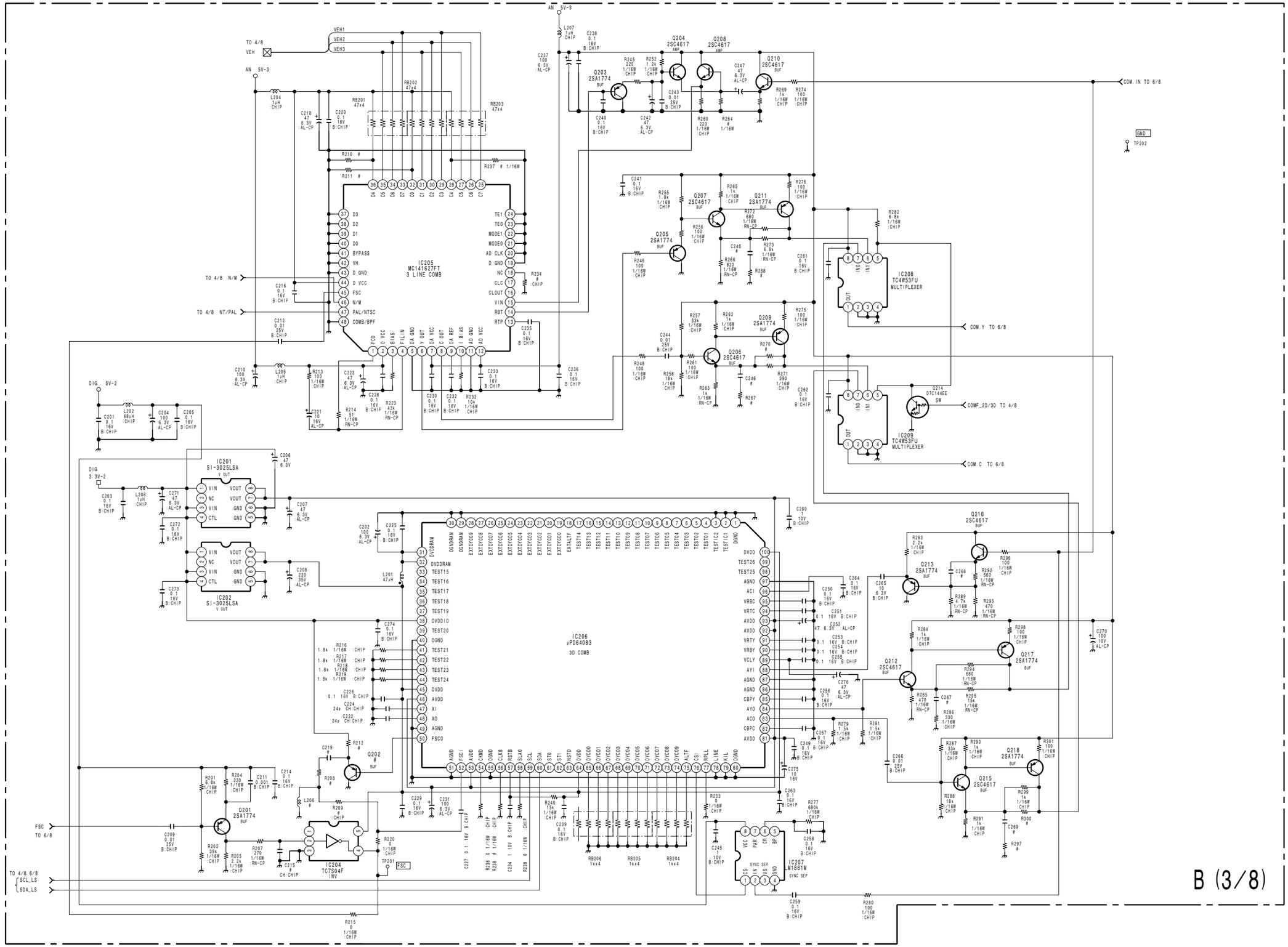
Index

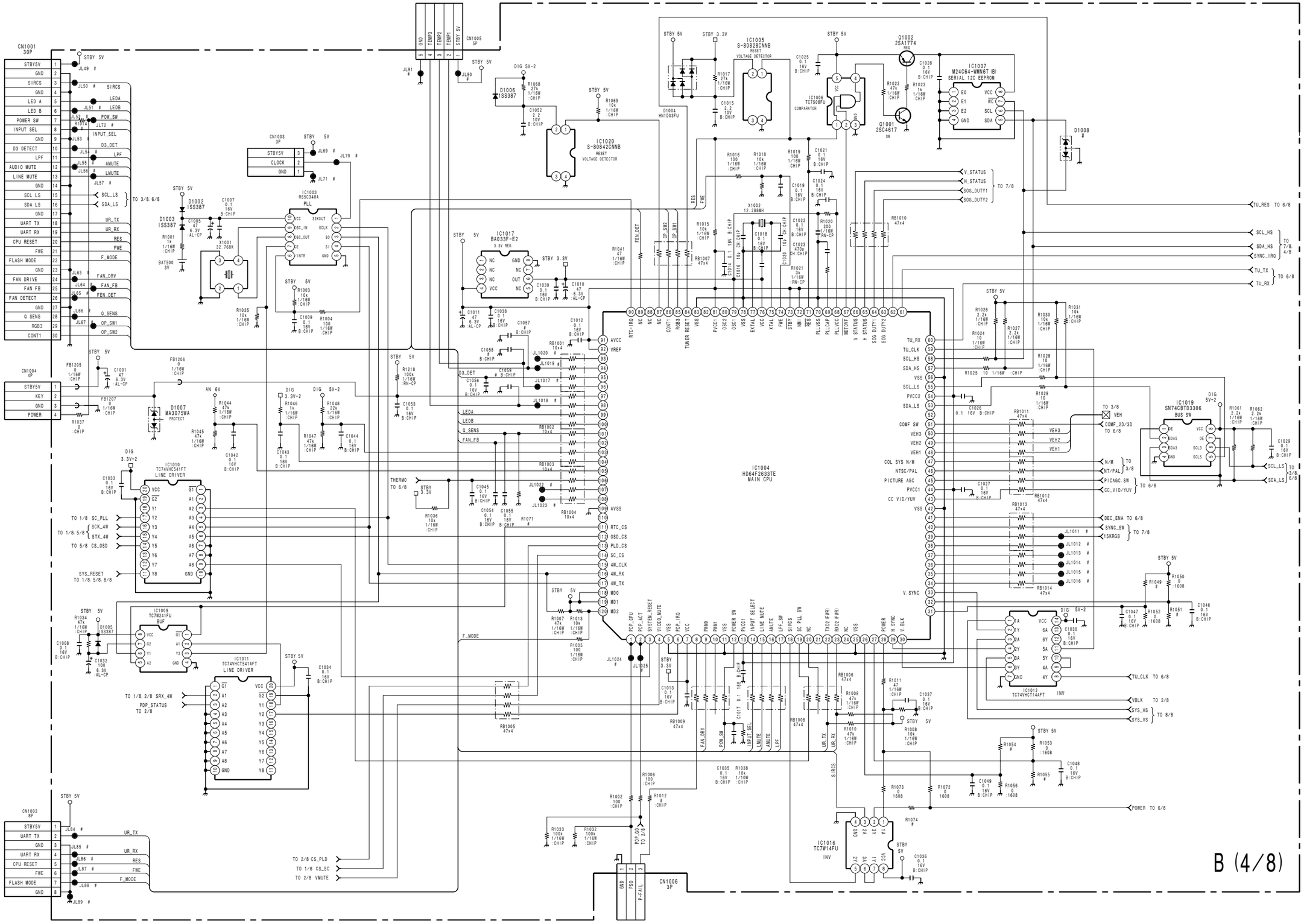
Board Name	Page
B	8-2
H1	8-14
H2	8-14
Q	8-15
SP	8-14
S	8-20
U1 (FWD-50PX1)	8-21
Frame Wiring	8-22

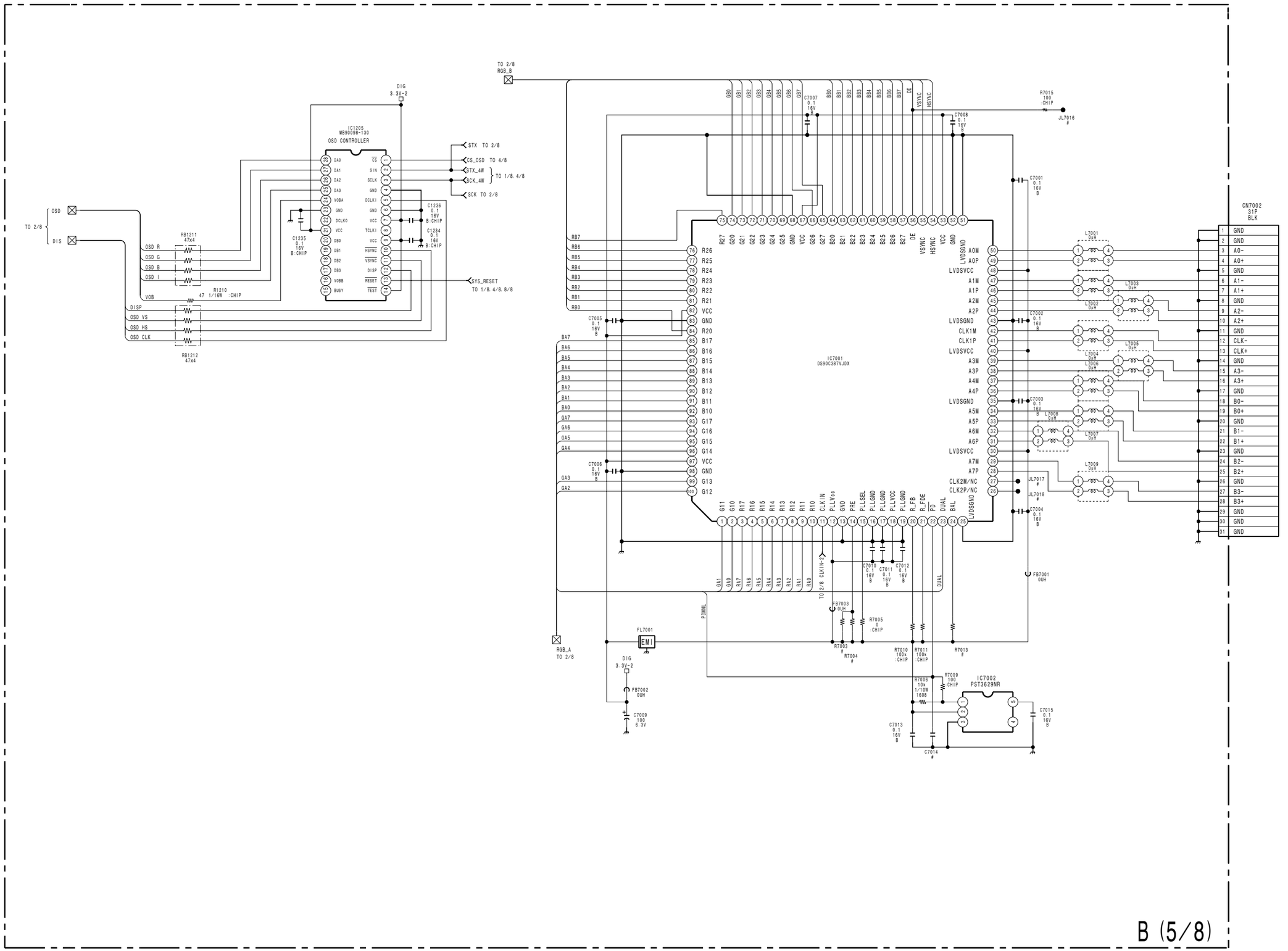
8-1

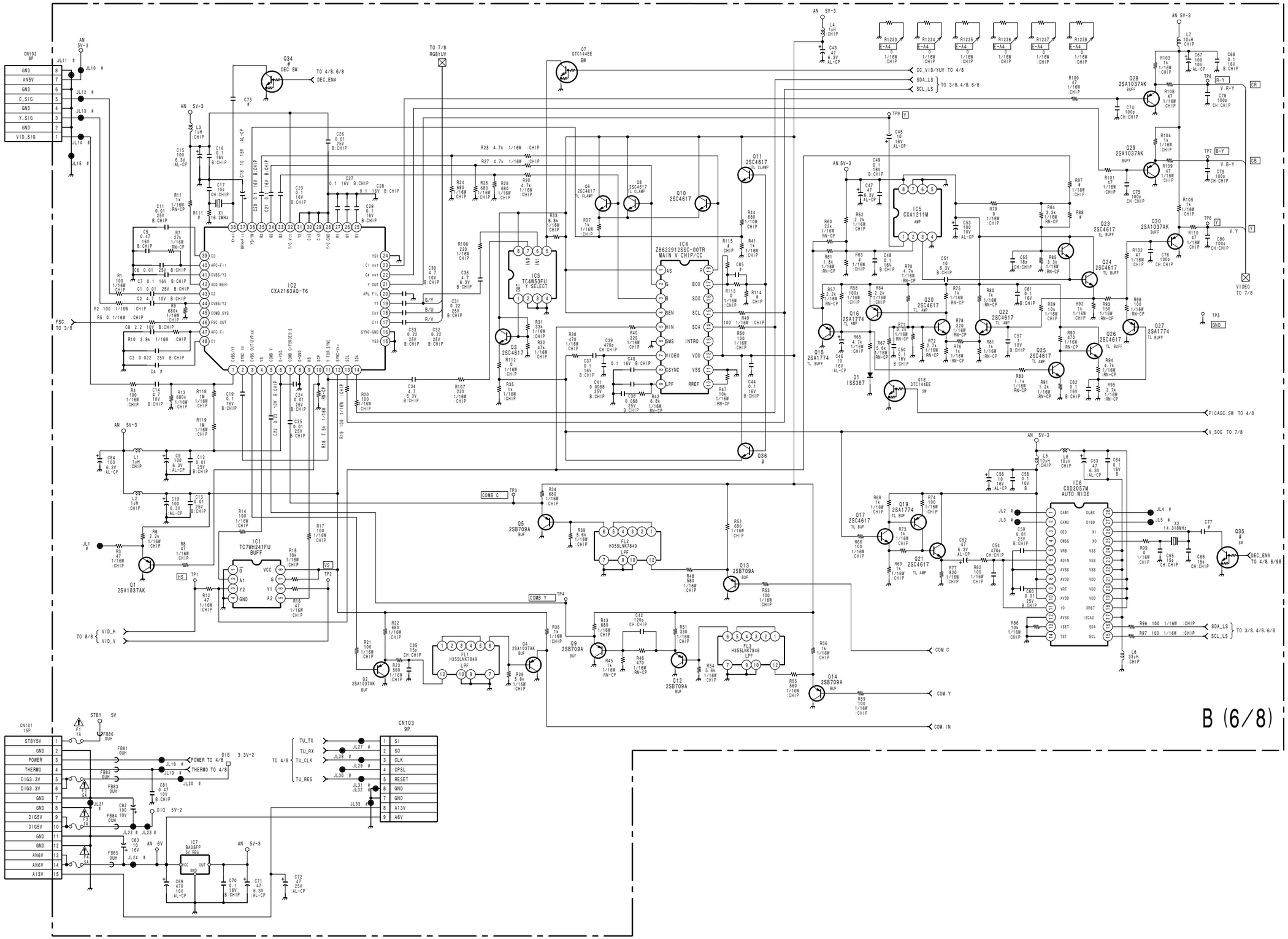

IC801
IP00C713
SCAN CONVERTER
IC802
MSM56V16160F
IC803
MSM56V16160F
IC804
MSM56V16160F
RGB_STC TO 8/8
IP2PLD_RGB TO 2/8
TO 2/8
TO 4/8. 5/8. 8/8
SYS_RESET
SC_PLL TO 4/8
TO 8/8
SRX_4W TO 2/8. 4/8
TO 4/8. 5/8
SCK_4W
TO 4/8
CS_SC
STX_4W TO 4/8. 5/8
SCVS
SCHS
SCCLK
POVS
POHS
POCLK
OCLK
MCLK
X801 74.175MHz
X802 100MHz
B (1/8)

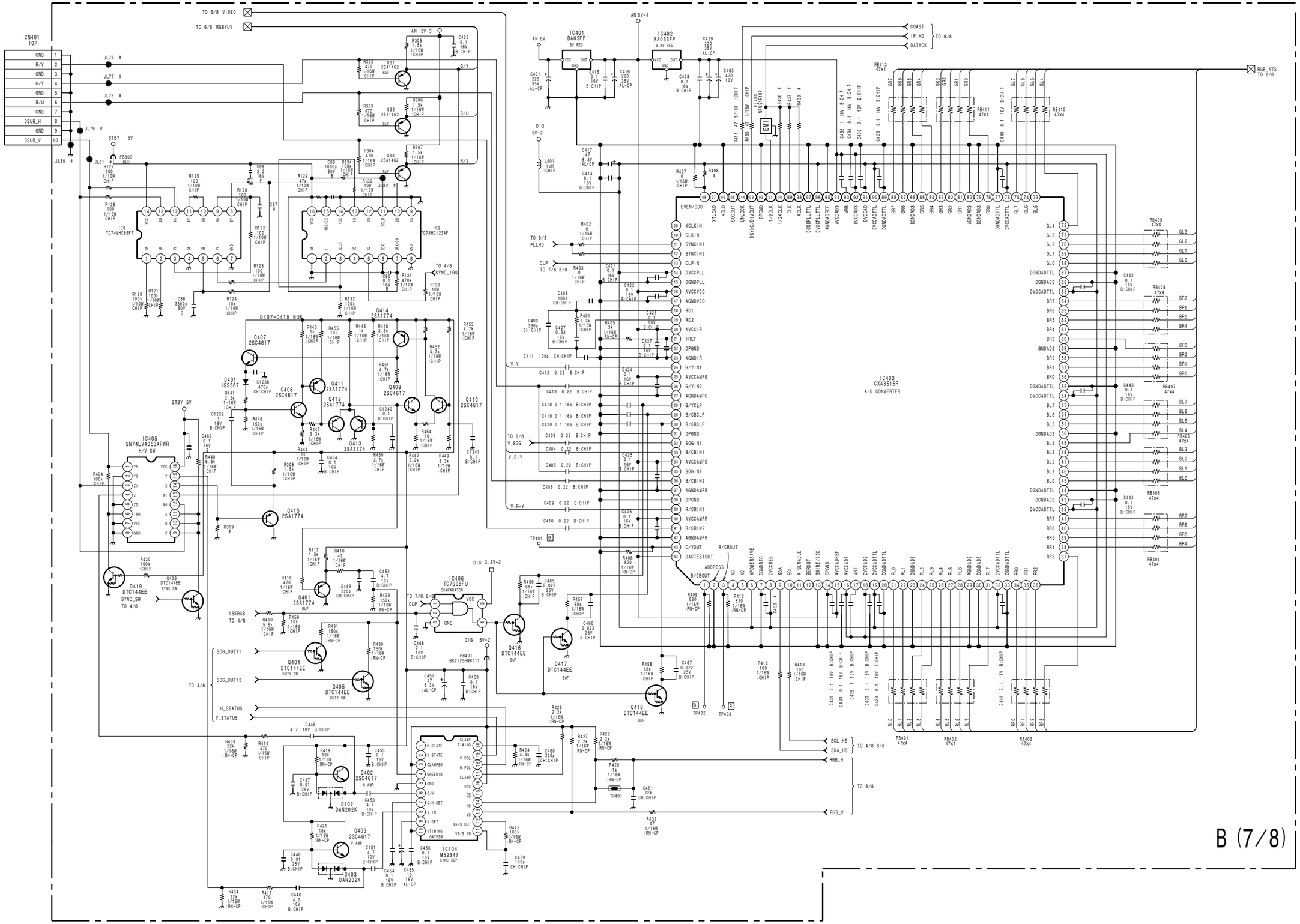

IC7102
XC2S150-5PQ208C1
PLD
IC7101
XC18V02VQ44C1
PROGRAM ROM
IC7026
PST9229NL
RESET
IC7010
BUF
IC7003
P007YZ012P
CN7001
8P
CN7025
8P
B (2/8)


IC205
MC141627FT
3 LINE COMB
IC206
μPD64083
3D COMB
IC201
SI-3025LSA
IC202
SI-3025LSA
IC204
TC7S04F
INV
IC207
LM1881M
SYNC SEP
IC208
TC4W53FU
MULTIPLEXER
IC209
TC4W53FU
MULTIPLEXER
Q201 2SA1774 BUF
Q202 # BUF
Q203 2SA1774 BUF
Q204 2SC4617 AMP
Q205 2SA1774 BUF
Q206 2SC4617 BUF
Q207 2SC4617 BUF
Q208 2SC4617 AMP
Q209 2SA1774 BUF
Q210 2SC4617 BUF
Q211 2SA1774 BUF
Q212 2SC4617 BUF
Q213 2SA1774 BUF
Q214 DTC144EE SW
Q215 2SC4617 BUF
Q216 2SC4617 BUF
Q217 2SA1774 BUF
Q218 2SA1774 BUF
TO 4/8 VEH
TO 4/8 N/M
TO 4/8 NT/PAL
TO 4/8.6/8 SCL_LS
SDA_LS
FSC TO 6/8
COM. IN TO 6/8
COM.Y TO 6/8
COM.C TO 6/8
COMF_2D/3D TO 4/8
GND
TP202
TP201
AN 5V-3
DIG 5V-2
DIG 3.3V-2
B (3/8)


CN1001 30P
STBY5V
GND
SIRCS
LED A
LED B
POWER SW
INPUT SEL
D3 DETECT
LPF
AUDIO MUTE
LINE MUTE
SCL LS
SDA LS
UART TX
UART RX
CPU RESET
FWE
FLASH MODE
FAN DRIVE
FAN FB
FAN DETECT
Q SENS
RGB3
CONT1
TO 3/8. 6/8
CN1003 3P
CLOCK
CN1005 5P
GND
TEMP3
TEMP2
TEMP1
STBY 5V
CN1004 4P
KEY
POWER
IC1005 S-80828CNNB RESET VOLTAGE DETECTOR
IC1020 S-80842CNNB RESET VOLTAGE DETECTOR
IC1007 M24C64-WMN6T (B) SERIAL 12C EEPROM
IC1006 TC7S08FU COMPARATOR
Q1002 2SA1774 REG
Q1001 2SC4617 SW
D1004 HN1D03FU
D1006 ISS387
D1002 ISS387
D1003 ISS387
D1005 ISS387
D1007 MA3075WA PROTECT
D1008
IC1003 R5SC348A PLL
X1001 32.768K
X1002 12.288MH
IC1017 BA033F-E2 3.3V REG.
IC1010 TC74VHC541FT LINE DRIVER
IC1011 TC74VHCT541AFT LINE DRIVER
IC1009 TC7W241FU BUF
IC1004 HD64F2633TE MAIN CPU
IC1019 SN74CBTD3306 BUS SW
IC1012 TC74VHCT14AFT INV
IC1016 TC7W14FU INV
RB1001 10x4
RB1002 10x4
RB1003 10x4
RB1004 10x4
RB1005 47x4
RB1006 47x4
RB1007 47x4
RB1008 47x4
RB1009 47x4
RB1010 47x4
RB1011 47x4
RB1012 47x4
RB1013 47x4
RB1014 47x4
CN1002 8P
UART TX
CPU RESET
FLASH MODE
CN1006 3P
GND
PSO
P-FAIL
TO 2/8 CS_PLD
TO 1/8 CS_SC
TO 2/8 VMUTE
THERMO TO 6/8
PDP_STATUS TO 2/8
TO 1/8. 2/8 SRX_4W
TO 1/8 SC_PLL
TO 1/8. 5/8
TO 5/8 CS_OSD
SYS_RESET TO 1/8. 5/8. 8/8
V_STATUS
H_STATUS
SOG_DUTY1
SOG_DUTY2
TO 7/8
TU_RES TO 6/8
SCL_HS
SDA_HS
SYNC_IRQ
TO 7/8. 4/8
TU_TX
TU_RX
TO 6/8
TU_CLK TO 6/8
VBLK TO 2/8
SYS_HS
SYS_VS
TO 8/8
POWER TO 6/8
TO 3/8 VEH
COMF_2D/3D TO 6/8
VEH3
VEH2
VEH1
N/M TO NT/PAL 3/8
PICAGC_SW
CC_VID/YUV
TO 6/8
DEC_ENA TO 6/8
SYNC_SW
15KRGB
TO 7/8
SCL_LS TO 3/8. 6/8
SDA_LS
B (4/8)


IC1005
MB90098-130
OSD CONTROLLER
DIG
3.3V-2
OSD
DIS
TO 2/8
RB1211
47x4
RB1212
47x4
R1210
47 1/16W :CHIP
OSD_R
OSD_G
OSD_B
OSD_I
VOB
DISP
OSD_VS
OSD_HS
OSD_CLK
C1235
0.1
16V
B:CHIP
C1236
0.1
16V
B:CHIP
C1234
0.1
16V
B:CHIP
STX TO 2/8
DS_OSD TO 4/8
STX_4W
SCK_4W
TO 1/8. 4/8
SCK TO 2/8
SYS_RESET
TO 1/8. 4/8. 8/8
TO 2/8
RGB_B
IC7001
DS90C387VJDX
C7007
0.1
16V
B
C7008
0.1
16V
B
R7015
100
:CHIP
JL7016
#
C7001
0.1
16V
B
C7002
0.1
16V
B
C7003
0.1
16V
B
C7004
0.1
16V
B
C7005
0.1
16V
B
C7006
0.1
16V
B
FB7001
0UH
FB7002
0UH
FB7003
0UH
C7009
100
6.3V
FL7001
EMI
R7003
#
R7004
#
R7005
0
:CHIP
R7010
100k
:CHIP
R7011
100k
:CHIP
R7013
#
R7006
10k
1/10W
1608
R7009
100
:CHIP
IC7002
PST3629NR
C7013
0.1
16V
B
C7014
#
C7015
0.1
16V
B
C7010
0.1
16V
B
C7011
0.1
16V
B
C7012
0.1
16V
B
JL7017
#
JL7018
#
TO 2/8 CLKIN÷2
PDWNL
DUAL
RGB_A
TO 2/8
L7001
0UH
L7002
0UH
L7003
0UH
L7004
0UH
L7005
0UH
L7006
0UH
L7007
0UH
L7008
0UH
L7009
0UH
CN7002
31P
BLK
GND
A0-
A0+
A1-
A1+
A2-
A2+
CLK-
CLK+
A3-
A3+
B0-
B0+
B1-
B1+
B2-
B2+
B3-
B3+
B (5/8)


B (6/8)
IC1 TC7WH241FU BUFF
IC2 CXA2163AQ-T6
IC3 TC4W53FU Y SELECT
IC4 Z86229125SC-00TR MAIN V CHIP/CC
IC5 CXA1211M AMP
IC6 CXD2057M AUTO WIDE
IC7 BA05FP 5V REG
CN102 8P
CN101 15P
CN103 9P
FL1 H355LNK7849 LPF
FL2 H355LNK7849 LPF
FL3 H355LNK7849 LPF
AN 5V-3
DIG 3.3V-2
DIG 5V-2
STBY 5V
FSC TO 3/8
VIDEO TO 7/8
TO 7/8 RGBYUV
TO 4/8. 6/8 DEC_ENA
CC_VID/YUV TO 4/8
SDA_LS
SCL_LS
TO 3/8. 4/8. 6/8
PICAGC. SW TO 4/8
V_SOG TO 7/8
POWER TO 4/8
THERMO TO 4/8
TO 8/8 VID_H
VID_V
TO 4/8 TU_TX
TU_RX
TU_CLK
TU_RES
COMB C
COMB Y
COM.C
COM.Y
COM.IN
DEC_ENA TO 4/8. 6/98
SDA_LS
SCL_LS
TO 3/8. 4/8. 6/8

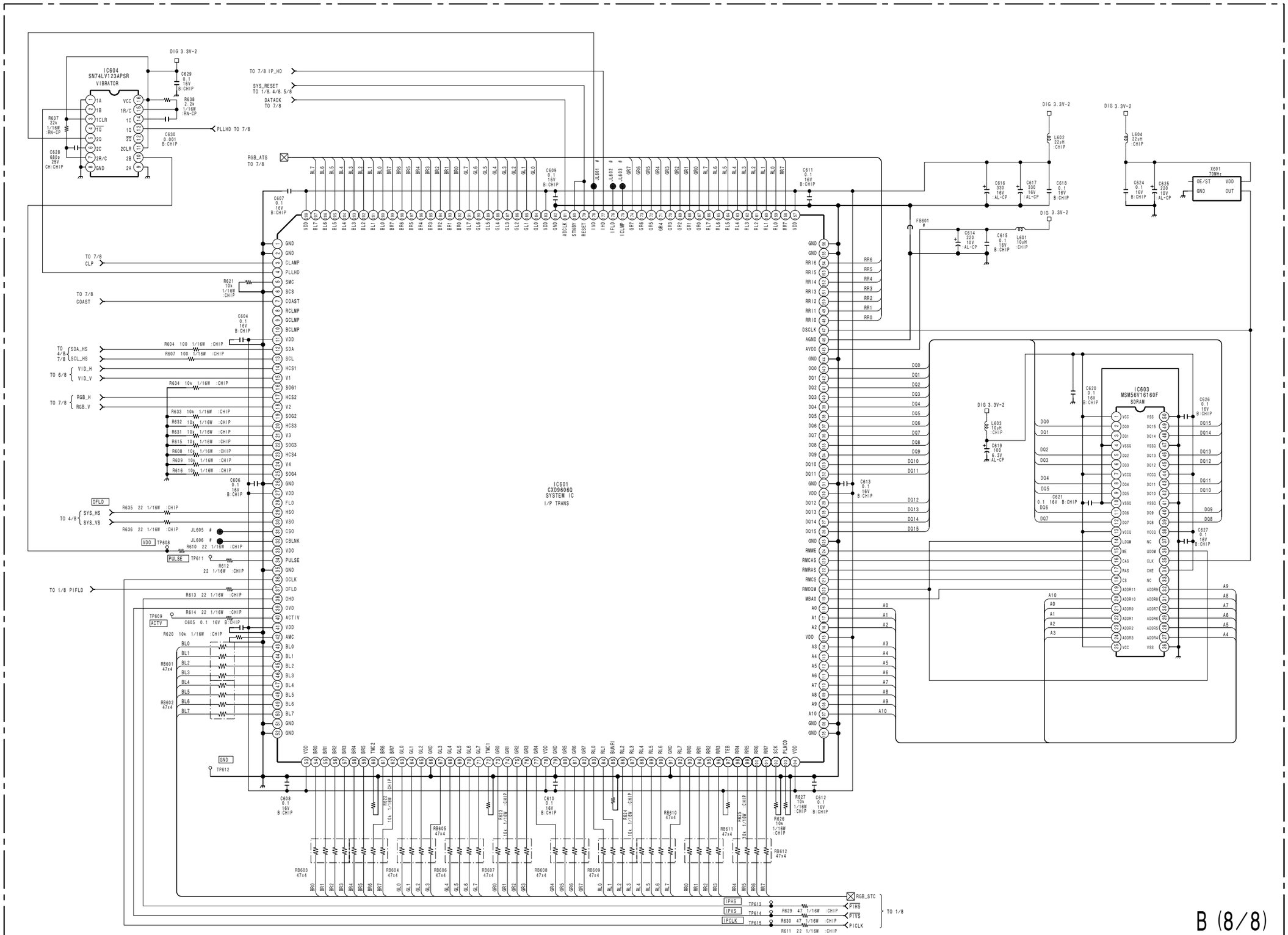


B (7/8)

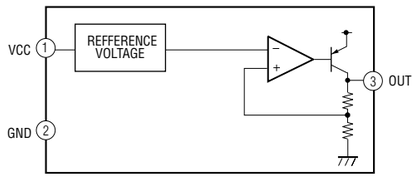
8-8 8-8

FWD-50PX1

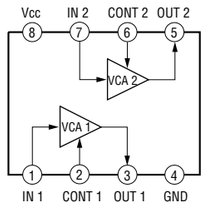
A B C D E F G H


IC604
SN74LV123APSR
VIBRATOR
IC601
CXD9606G
SYSTEM I/C
I/P TRANS
IC603
MSM56V16160F
SDRAM
X601
70MHz
B (8/8)

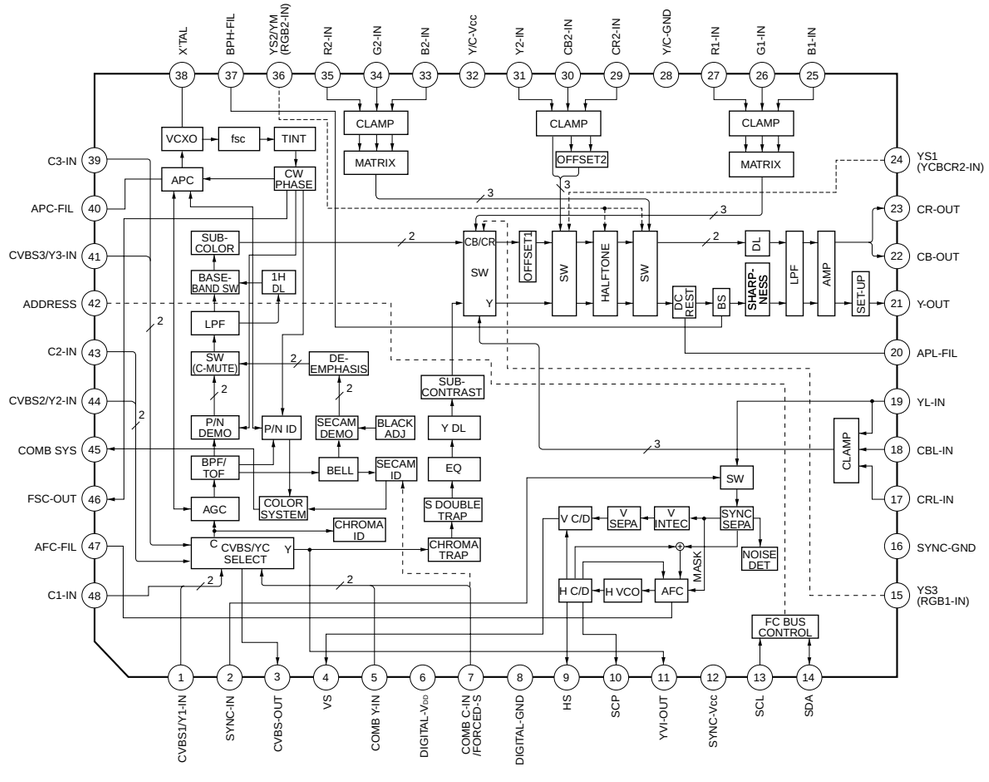
B (7/8) BA033FP-E2 (IC402)
B (4/8) BA033F-E2 (IC1017) (IC1017: VCC → ④ pin, OUT → ⑥ pin)
B (6/8), (7/8) BA05FP-E2 (IC7, IC401)



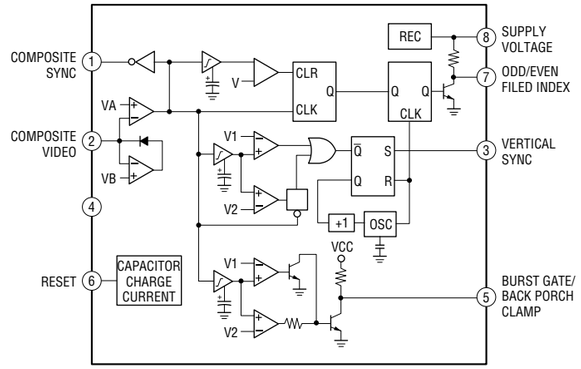
B (6/8) CXA1211M (IC5)



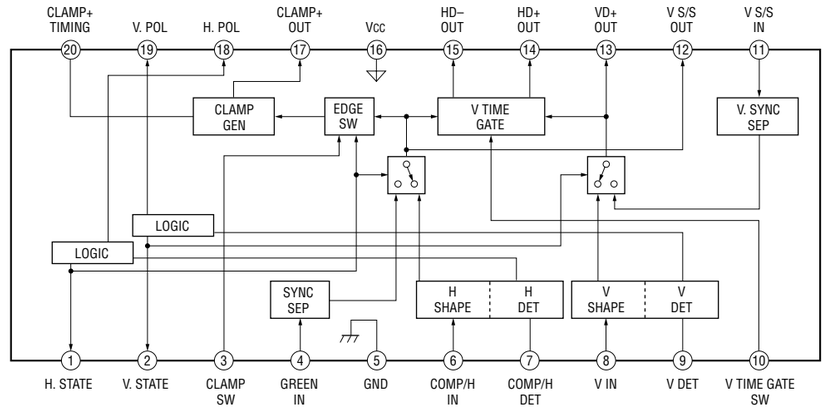
B (6/8) CXA2163Q-T6 (IC2)



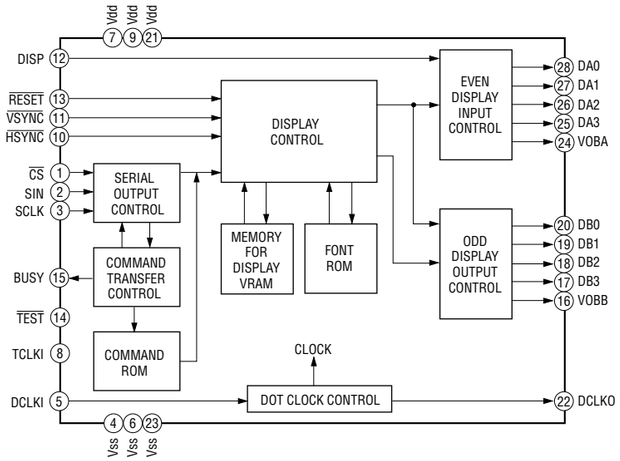
B (3/8) LM1881M (IC207)



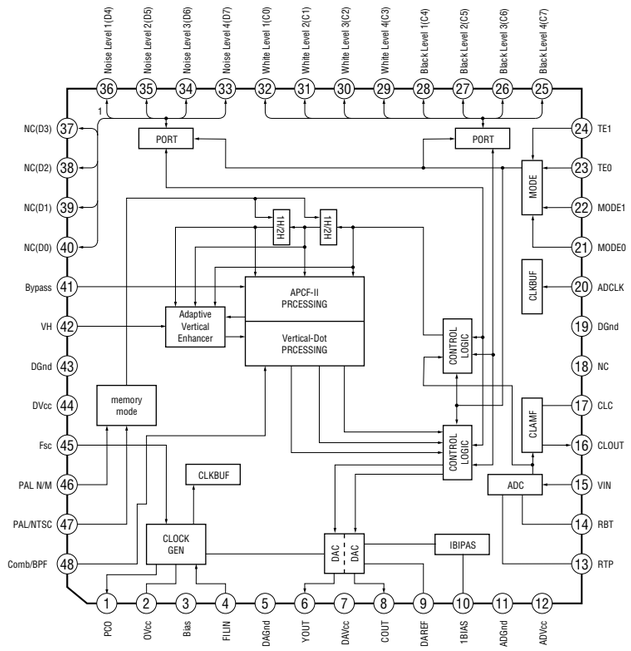
B (7/8) M52347FP (IC404)



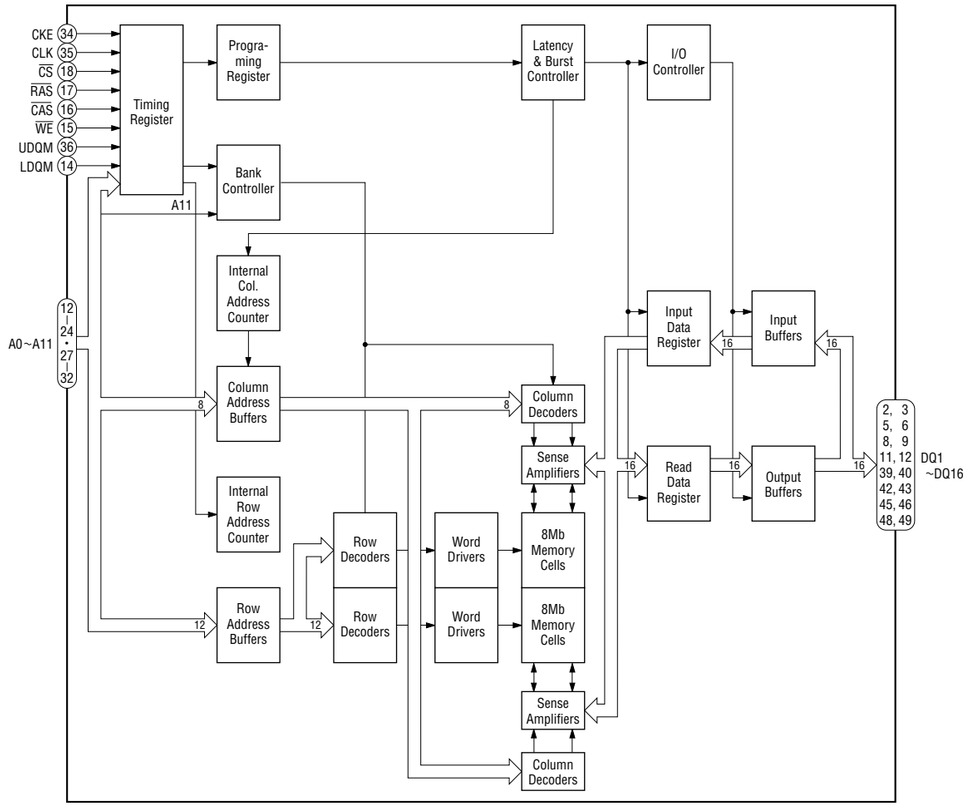
B (5/8) MB90098APF-A-130-BND-ER (IC1205)



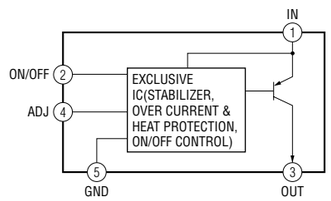
B (3/8) MC141627FT (IC205)



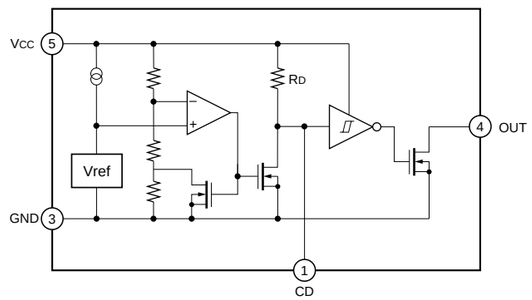
B (1/8), (8/8) MSM56V16160F-10TS-K (IC603, IC802, IC803, IC804)



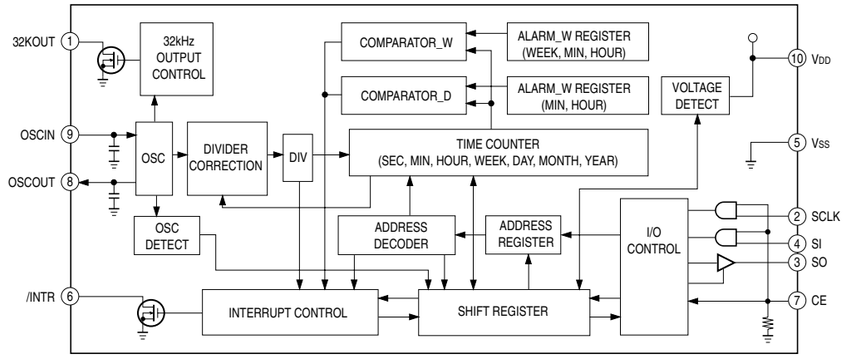
B (2/8) PQ07VZ012P (IC7003)



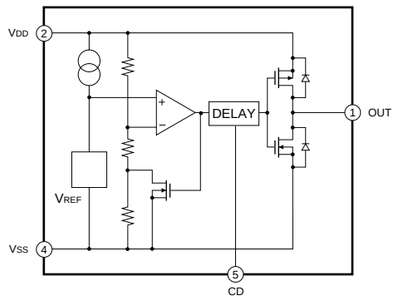
B (5/8) PST3629NR (IC7002)



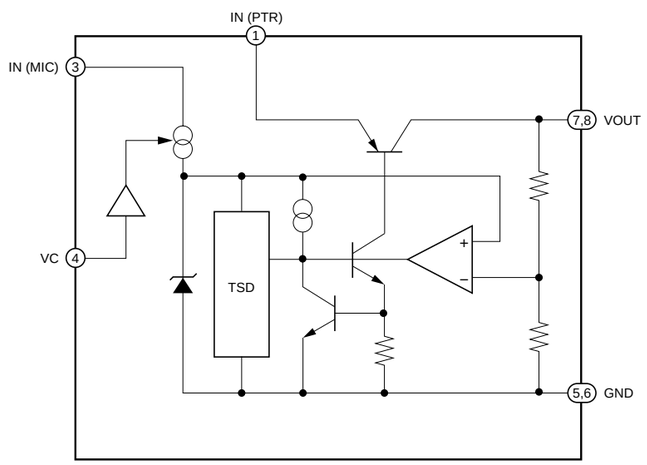
B (4/8) RS5C348A (IC1003)



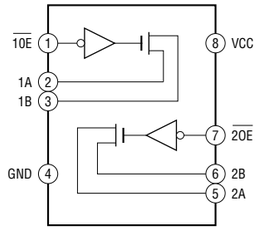
B (4/8) S-80828CNNB-B8NT2G (IC1005)
B (4/8) S-80842CNNB-B83T2G (IC1020)



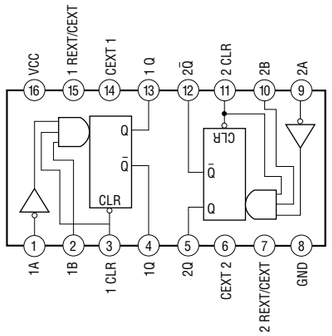
B (3/8) SI-3025LSA (IC201, IC202)



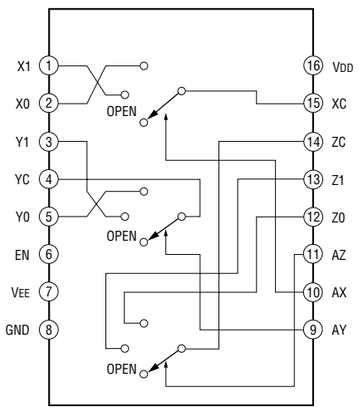
B (4/8) SN74CBTD3306 (IC1019)



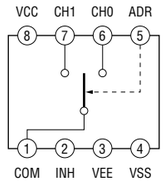
B (8/8) SN74LV123APWR (IC604)



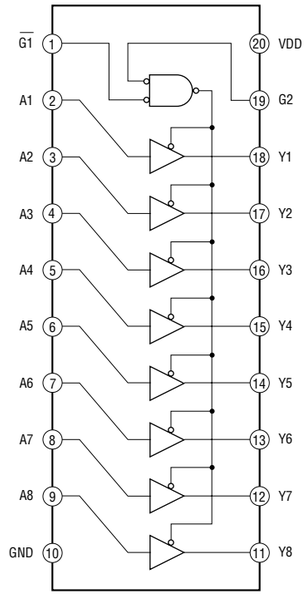
B (7/8) SN74LV4053APWR (IC405)



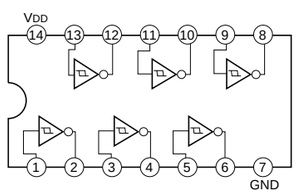
B (3/8), (6/8) TC4W53FU (IC208, IC209, IC3)



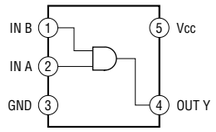
B (4/8) TC74VHC541FT (IC1010)
B (4/8) TC74VHCT541AFT (IC1011)



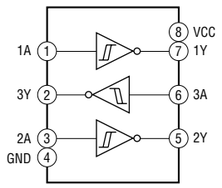
B (4/8) TC74VHCT14AFT (IC1012)



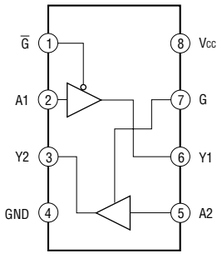
B (4/8) TC7S08FU-TE85R (IC1006)



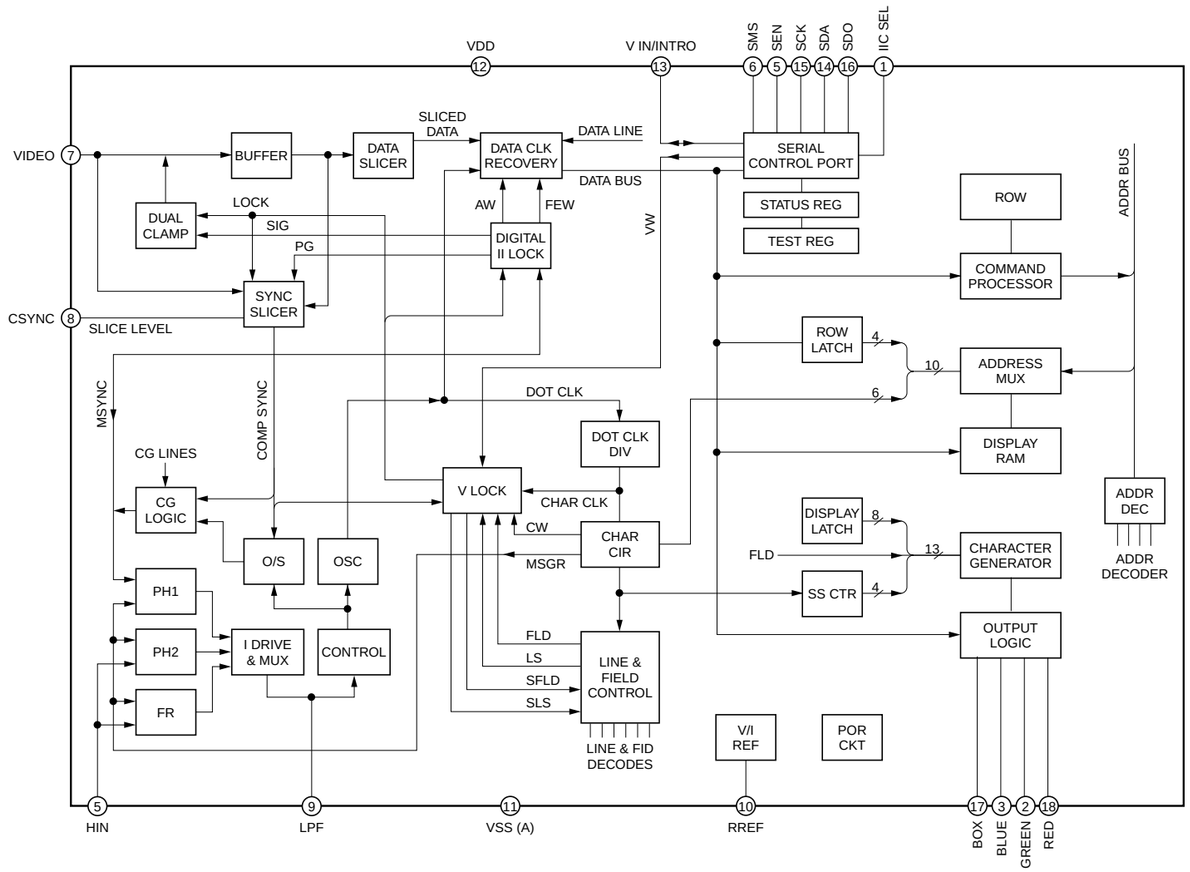
B (4/8) TC7W14FU (IC1016)

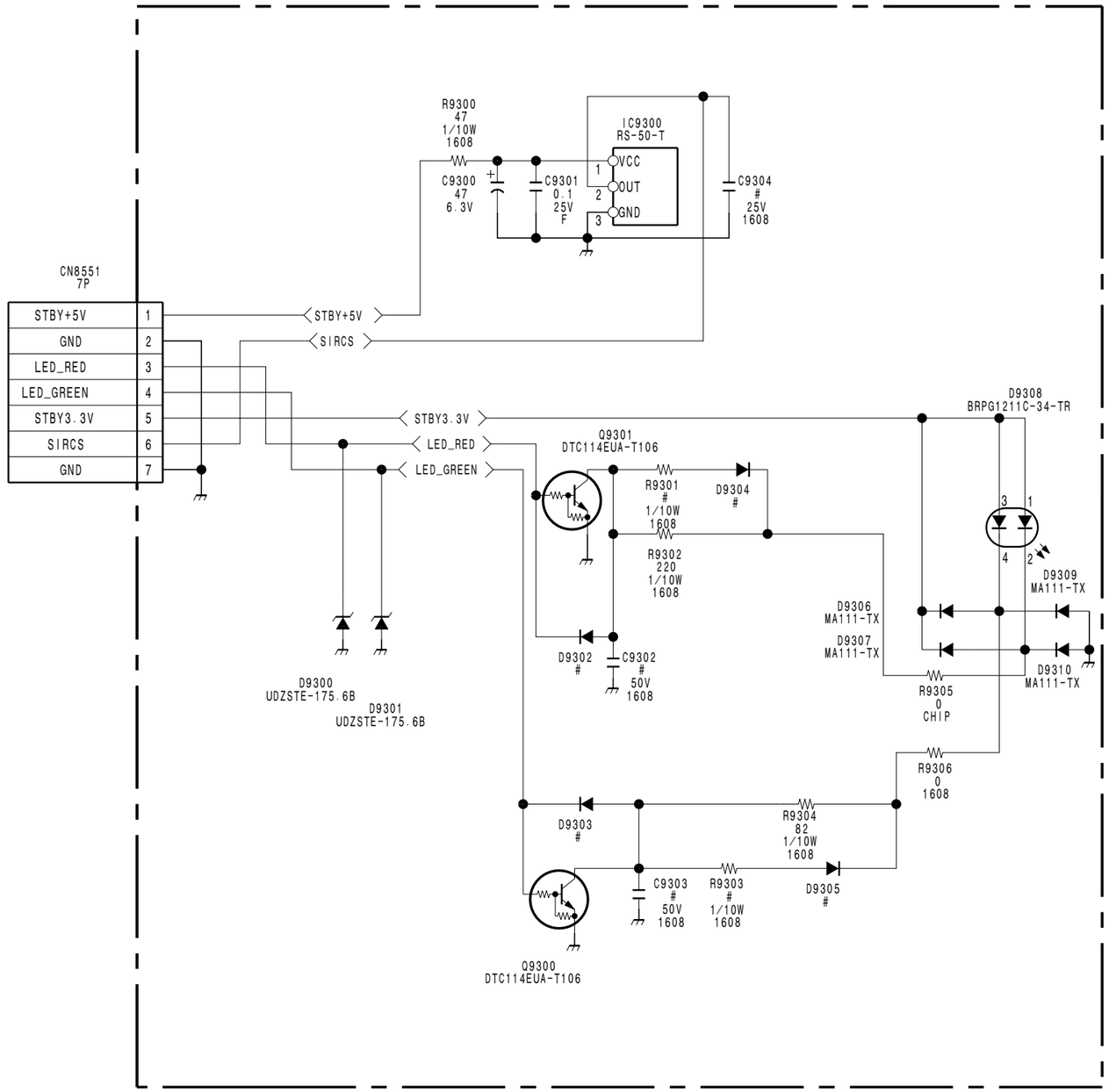


B (4/8), (6/8) TC7W241FU-TE12R (IC1009, IC1)

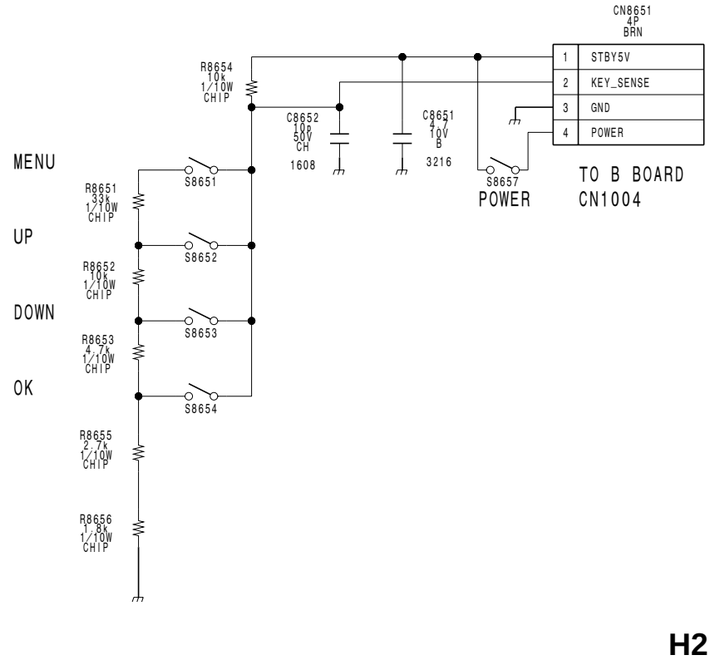


B (6/8) Z8622912SSC-00TR (IC4)

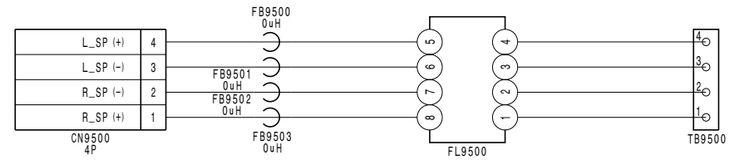



CN8551
7P
STBY+5V 1
GND 2
LED_RED 3
LED_GREEN 4
STBY3.3V 5
SIRCS 6
GND 7
STBY+5V
SIRCS
LED_RED
LED_GREEN
STBY3.3V
R9300
47
1/10W
1608
C9300
47
6.3V
C9301
0.1
25V
F
IC9300
RS-50-T
VCC
OUT
GND
C9304
#
25V
1608
Q9301
DTC114EUA-T106
R9301
#
1/10W
1608
D9304
#
R9302
220
1/10W
1608
D9308
BRPG1211C-34-TR
D9309
MA111-TX
D9306
MA111-TX
D9307
MA111-TX
D9310
MA111-TX
D9302
#
C9302
#
50V
1608
D9300
UDZSTE-175.6B
D9301
UDZSTE-175.6B
R9305
0
CHIP
R9306
0
1608
D9303
#
R9304
82
1/10W
1608
C9303
#
50V
1608
R9303
#
1/10W
1608
D9305
#
Q9300
DTC114EUA-T106

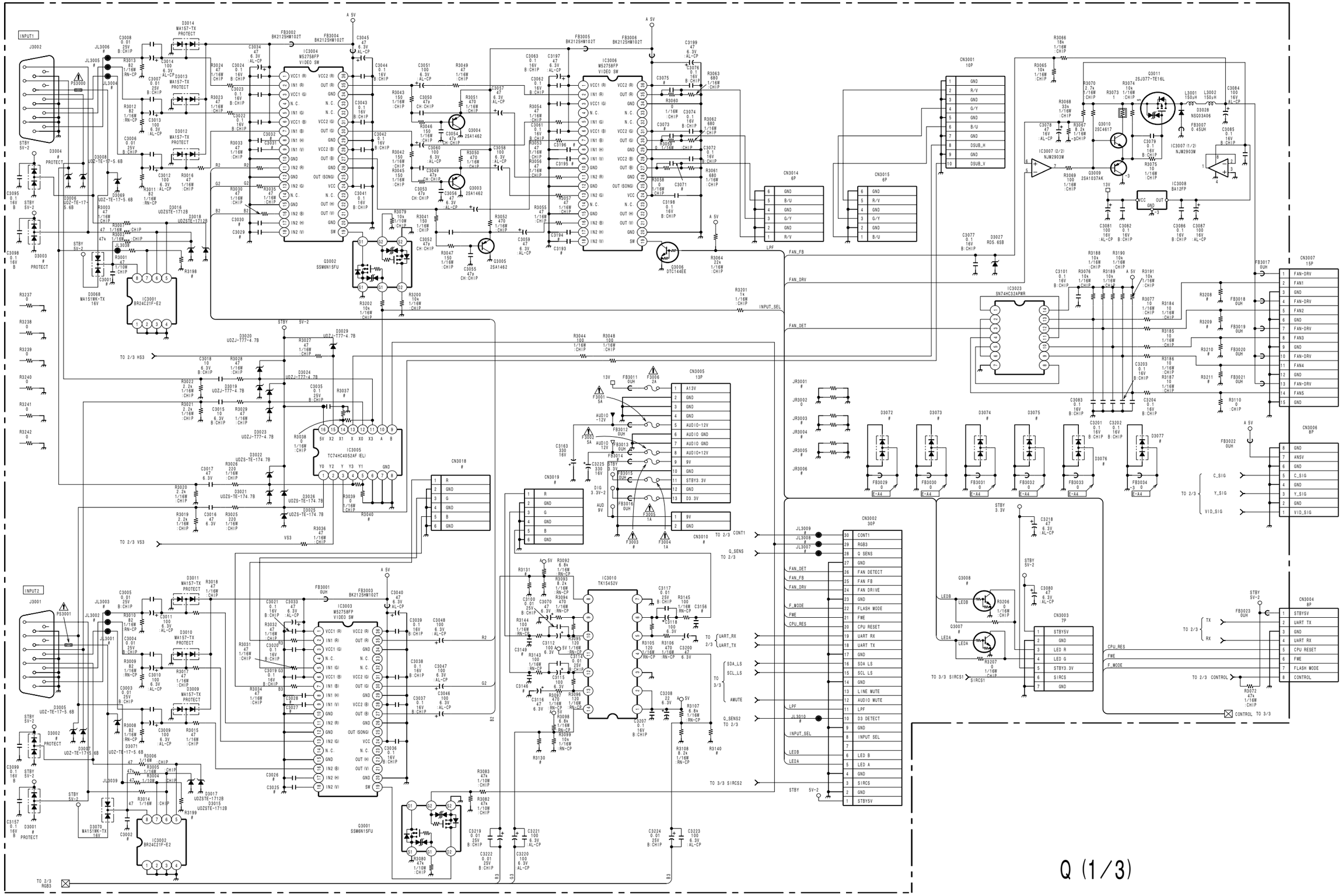
H1

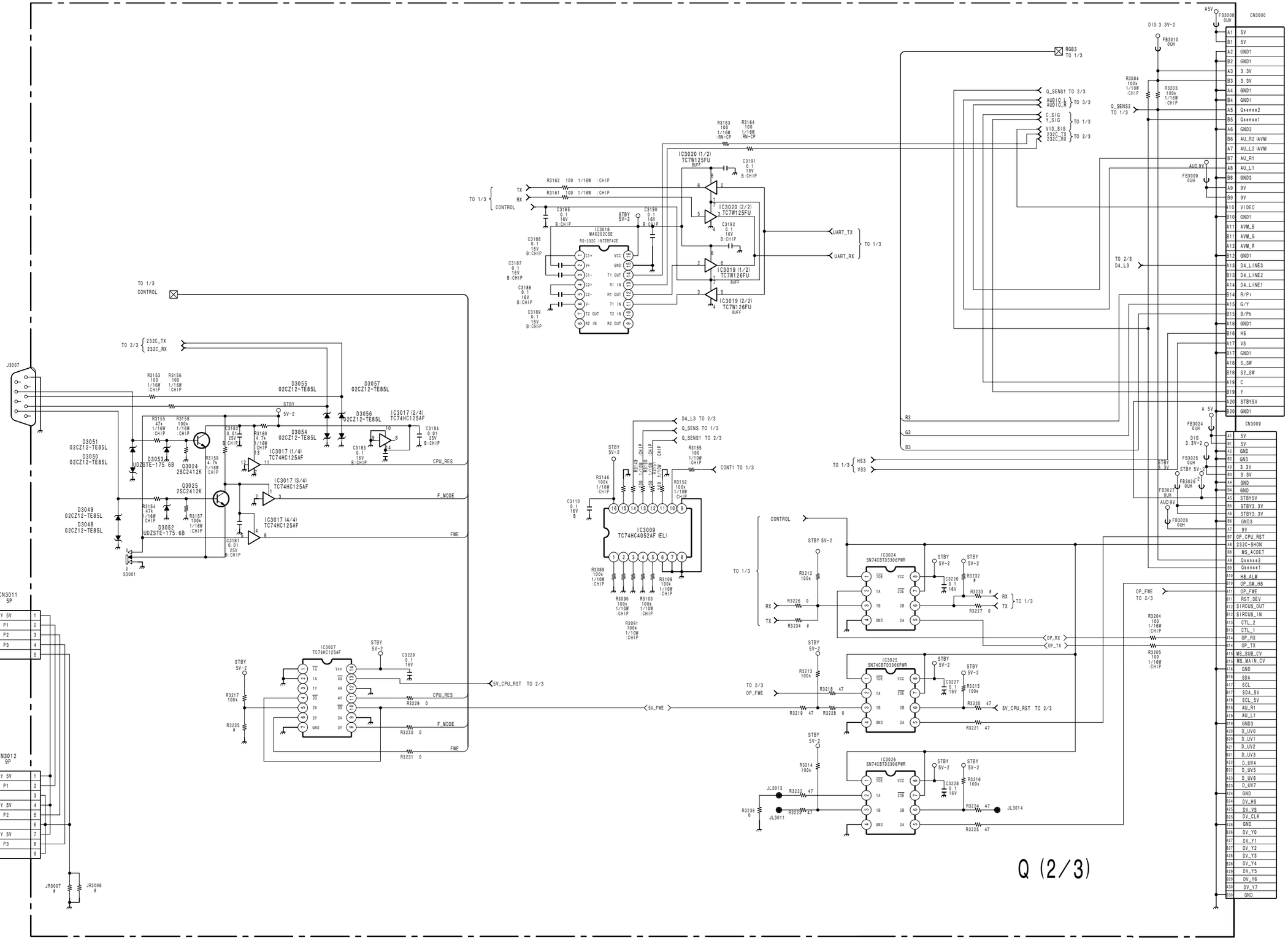

CN8651
4P
BRN
STBY5V 1
KEY_SENSE 2
GND 3
POWER 4
R8654
10k
1/10W
CHIP
C8652
10n
50V
CH
1608
C8651
4.7
10V
B
3216
MENU
UP
DOWN
OK
S8651
S8652
S8653
S8654
S8657
POWER
R8651
33k
1/10W
CHIP
R8652
10k
1/10W
CHIP
R8653
4.7k
1/10W
CHIP
R8655
2.7k
1/10W
CHIP
R8656
1.8k
1/10W
CHIP
TO B BOARD
CN1004

H2


L_SP (+) 4
L_SP (–) 3
R_SP (–) 2
R_SP (+) 1
CN9500
4P
FB9500
0uH
FB9501
0uH
FB9502
0uH
FB9503
0uH
FL9500
TB9500

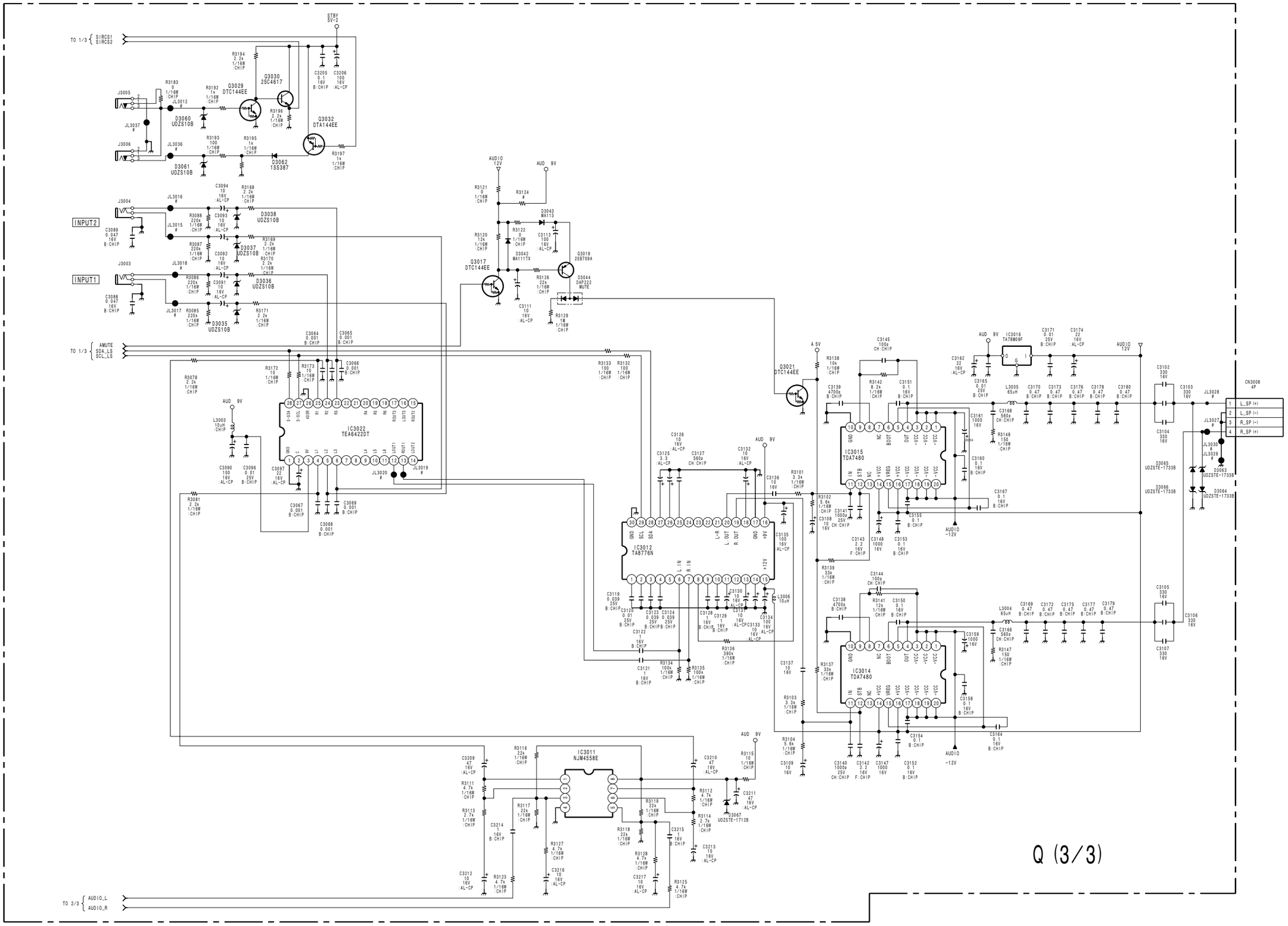
SP


INPUT1
INPUT2
IC3004 M52758FP VIDEO SW
IC3006 M52758FP VIDEO SW
IC3003 M52758FP VIDEO SW
IC3010 TK15452V
IC3023 SN74HC32APWR
IC3005 TC74HC4052AF (EL)
IC3001 BR24C21F-E2
IC3002 BR24C21F-E2
Q3002 SSM6N15FU
Q3001 SSM6N15FU
Q3006 DTC144EE
Q3004 2SA1462
Q3003 2SA1462
Q3005 2SA1462
Q3011 2SJ377-TE16L
Q3010 2SC4617
Q3009 2SA1037AK
IC3007 (1/2) NJM2903M
IC3007 (2/2) NJM2903M
IC3008 BA12FP
CN3001 10P
CN3002 30P
CN3003 7P
CN3004 8P
CN3005 13P
CN3006 8P
CN3007 15P
CN3010 #
CN3014 6P
CN3015 6P
CN3018 #
CN3019 #
LPF
FAN_FB
FAN_DRV
INPUT_SEL
FAN_DET
Q_SENS
F_MODE
FWE
CPU_RES
LEDB
LEDA
SDA_LS
SCL_LS
AMUTE
UART_RX
UART_TX
CONTROL
TO 2/3 HS3
TO 2/3 VS3
TO 2/3 RGB3
TO 2/3 CONT1
TO 3/3 SIRCS1
TO 3/3 SIRCS2
Q (1/3)

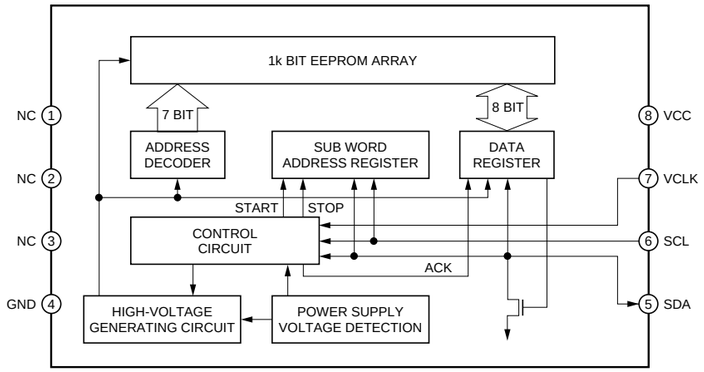


8-16 8-16

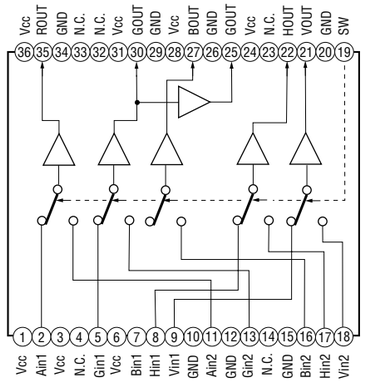
FWD-50PX1


TO 1/3 SIRCS1 SIRCS2
STBY 5V-2
Q3030 2SC4617
Q3029 DTC144EE
Q3032 DTA144EE
D3060 UDZS10B
D3061 UDZS10B
D3062 1SS387
INPUT2
INPUT1
D3038 UDZS10B
D3037 UDZS10B
D3036 UDZS10B
D3035 UDZS10B
TO 1/3 AMUTE SDA_LS SCL_LS
IC3022 TEA6422DT
AUDIO 12V
AUD 9V
Q3017 DTC144EE
D3042 MA111TX
D3043 MA113
Q3019 2SB709A
D3044 DAP222 MUTE
A 5V
Q3021 DTC144EE
IC3016 TA78M09F
IC3015 TDA7480
IC3014 TDA7480
IC3012 TA8776N
IC3011 NJM4558E
L3003 10μH
L3004 65μH
L3005 65μH
L3006 10μH
D3065 UDZSTE-1733B
D3066 UDZSTE-1733B
D3063 UDZSTE-1733B
D3064 UDZSTE-1733B
D3067 UDZSTE-1712B
CN3008 4P
L_SP (+)
L_SP (-)
R_SP (-)
R_SP (+)
TO 2/3 AUDIO_L AUDIO_R
Q (3/3)

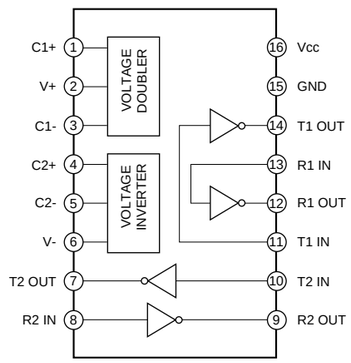
Q (1/3) BR24C21F (IC3001, IC3002)



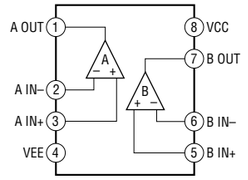
Q (1/3) M52758FP (IC3003, IC3004, IC3006)



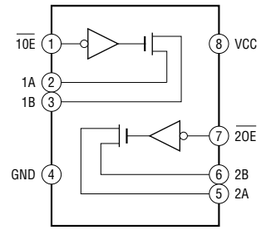
Q (2/3) MAX202CSE (IC3018)



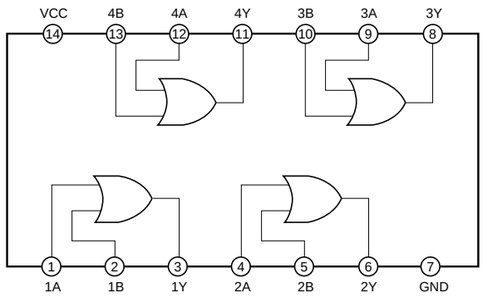
Q (3/3) NJM4558E(TE2) (IC3011)



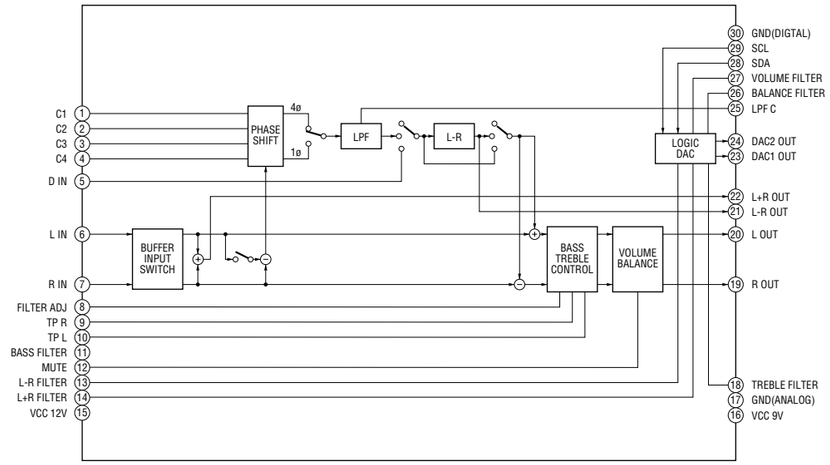
Q (2/3) SN74CBTD3306PWR-12 (IC3024, IC3025, IC3026)



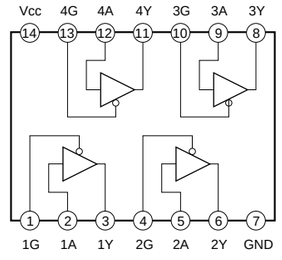
Q (1/3) SN74HC32APWR (IC3023)



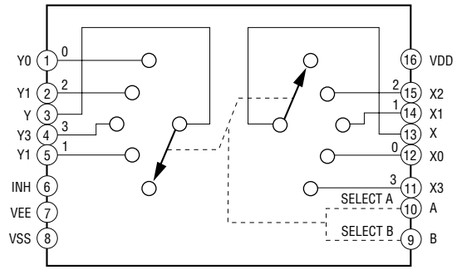
Q (3/3) TA8776N (IC3012)



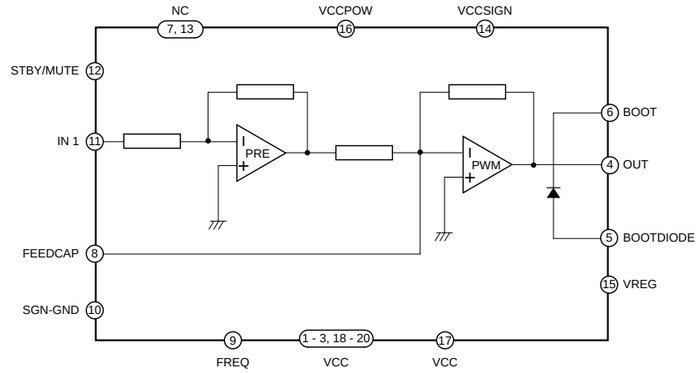
Q (2/3) TC74HC125AF (IC3027)



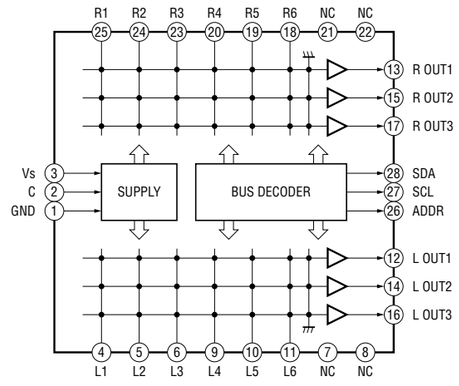
Q (1/3), (2/3) TC74HC4052AF(EL) (IC3005, IC3009)



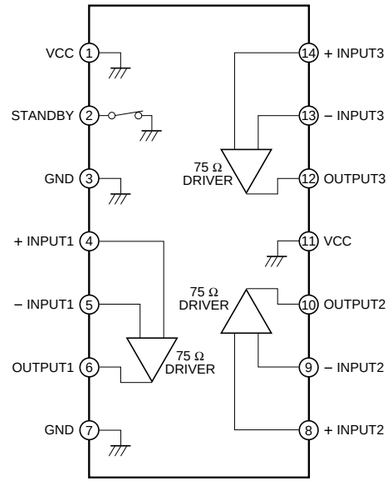
Q (3/3) TDA7480 (IC3014, IC3015)

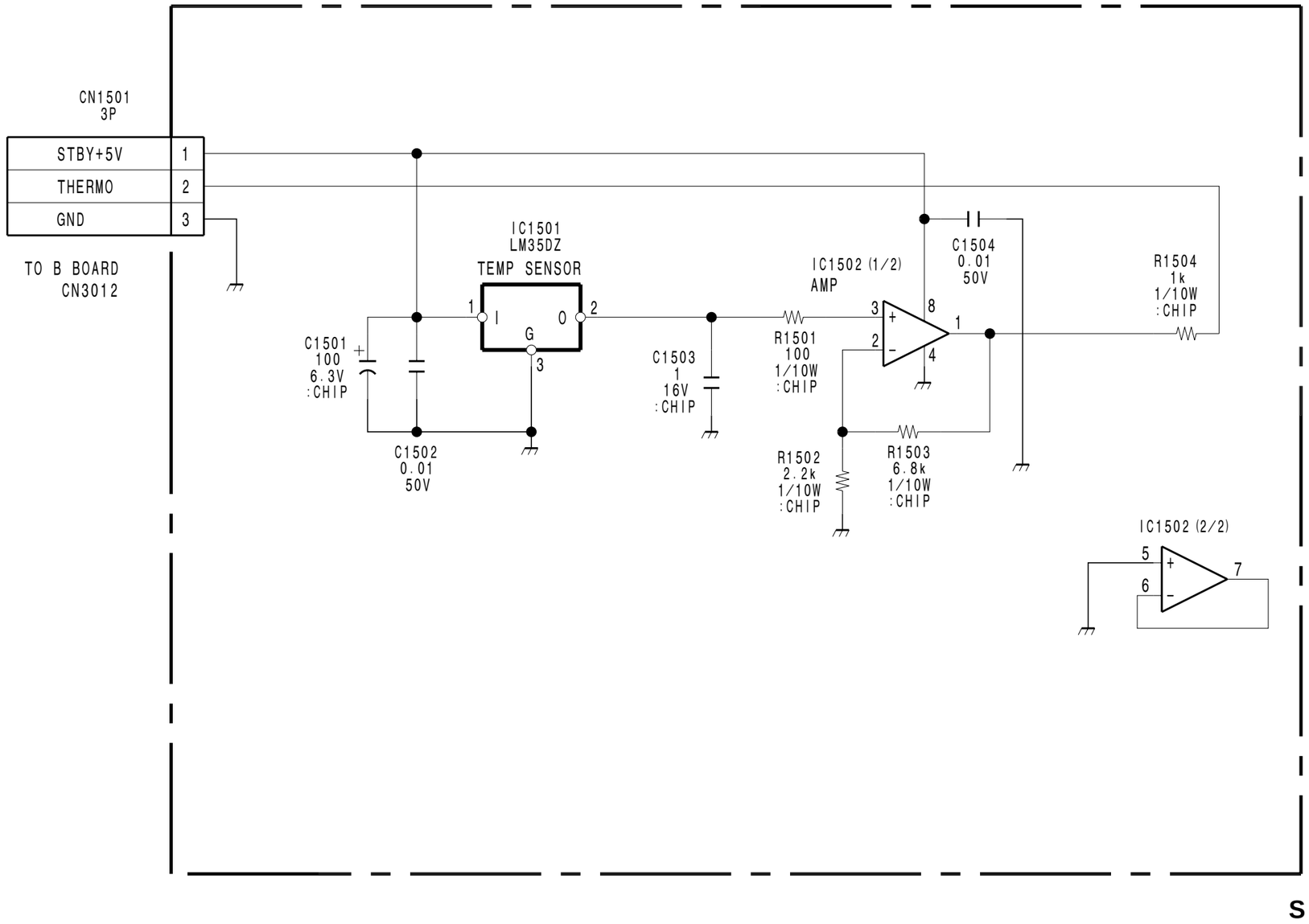


Q (3/3) TEA6422DT (IC3022)

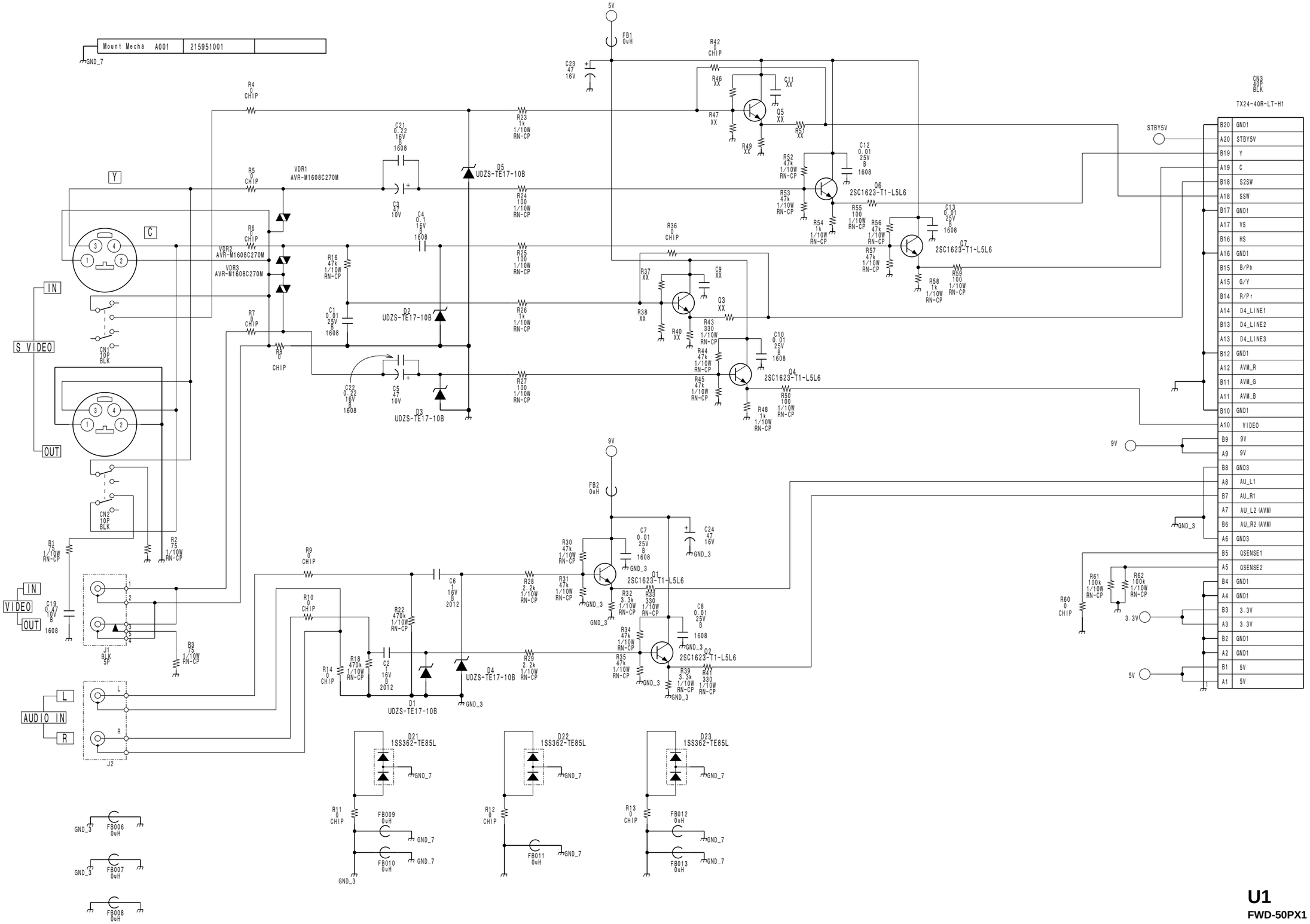


Q (1/3) TK15452V (IC3010)




CN1501
3P
STBY+5V
THERMO
GND
1
2
3
TO B BOARD
CN3012
IC1501
LM35DZ
TEMP SENSOR
I
O
G
C1501
100
6.3V
:CHIP
C1502
0.01
50V
C1503
1
16V
:CHIP
IC1502 (1/2)
AMP
R1501
100
1/10W
:CHIP
C1504
0.01
50V
R1504
1k
1/10W
:CHIP
R1502
2.2k
1/10W
:CHIP
R1503
6.8k
1/10W
:CHIP
IC1502 (2/2)

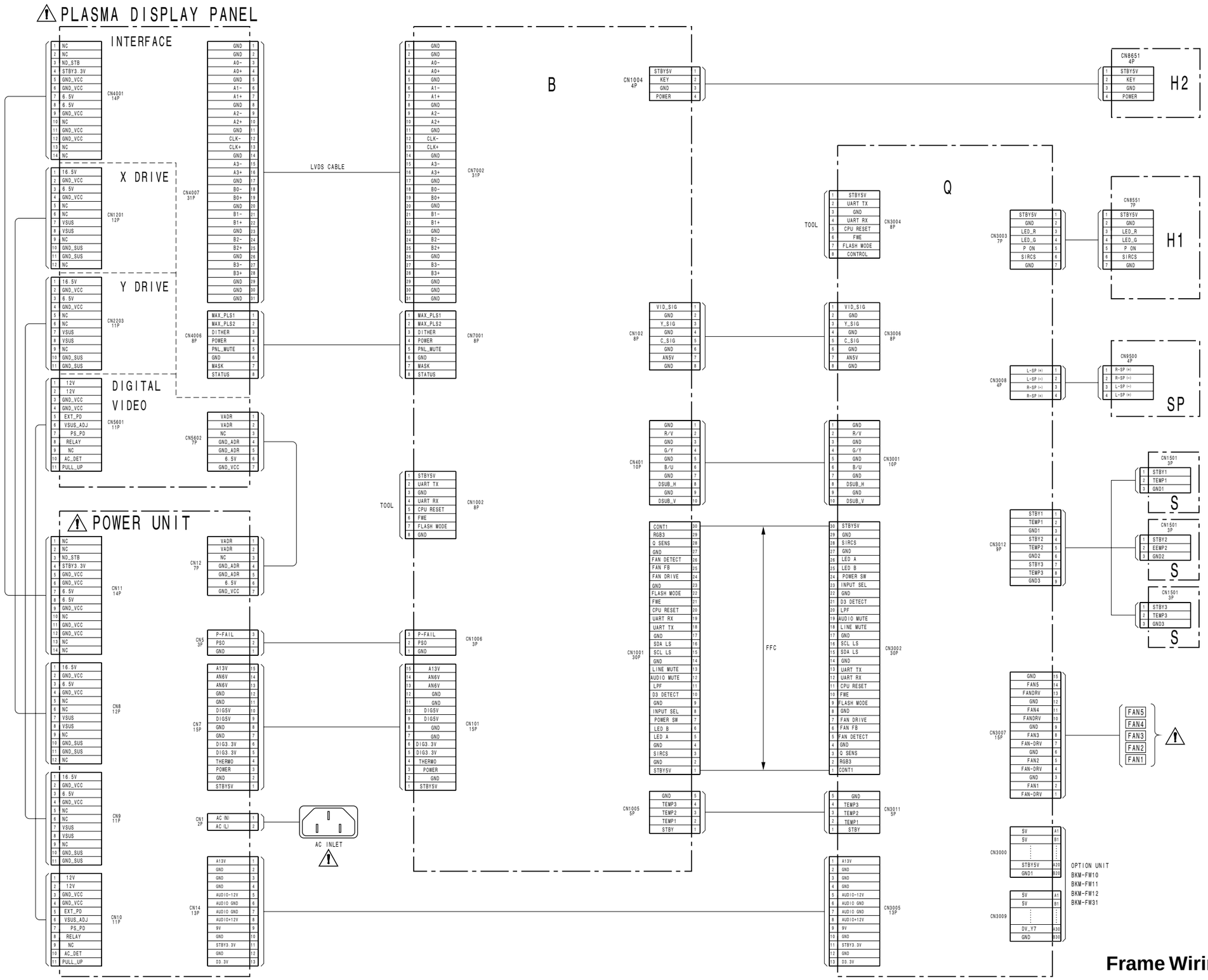
S



U1
FWD-50PX1

A | B | C | D | E | F | G | H

1 | 2 | 3 | 4 | 5


PLASMA DISPLAY PANEL
INTERFACE
CN4001 14P
X DRIVE
CN1201 12P
Y DRIVE
CN2203 11P
DIGITAL VIDEO
CN5601 11P
CN4007 31P
CN4006 8P
CN5602 7P
LVDS CABLE
CN7002 31P
CN7001 8P
B
CN1004 4P
CN8651 4P
H2
Q
TOOL
CN3004 8P
CN3003 7P
CN8551 7P
H1
CN102 8P
CN3006 8P
CN401 10P
CN3001 10P
CN9500 4P
CN3008 4P
SP
CN1501 3P
S
CN1002 8P
CN1001 30P
FFC
CN3002 30P
CN3012 9P
CN1005 5P
CN3011 5P
CN3007 15P
FAN5
FAN4
FAN3
FAN2
FAN1
POWER UNIT
CN11 14P
CN12 7P
CN5 3P
CN1006 3P
CN8 12P
CN7 15P
CN101 15P
CN9 11P
CN1 2P
AC INLET
CN10 11P
CN14 13P
CN3005 13P
CN3000
CN3009
OPTION UNIT
BKM-FW10
BKM-FW11
BKM-FW12
BKM-FW31

Section 9
Board Layouts

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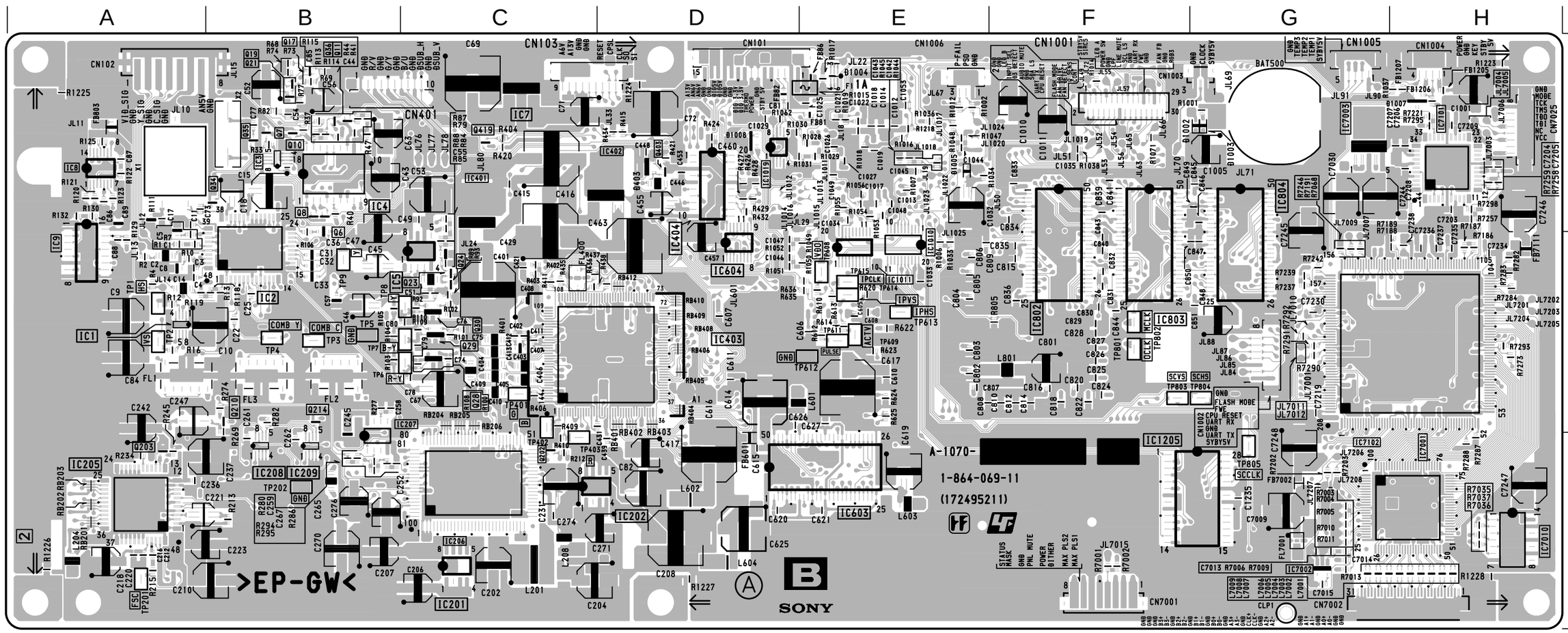


B -A SIDE-
SUFFIX: -11

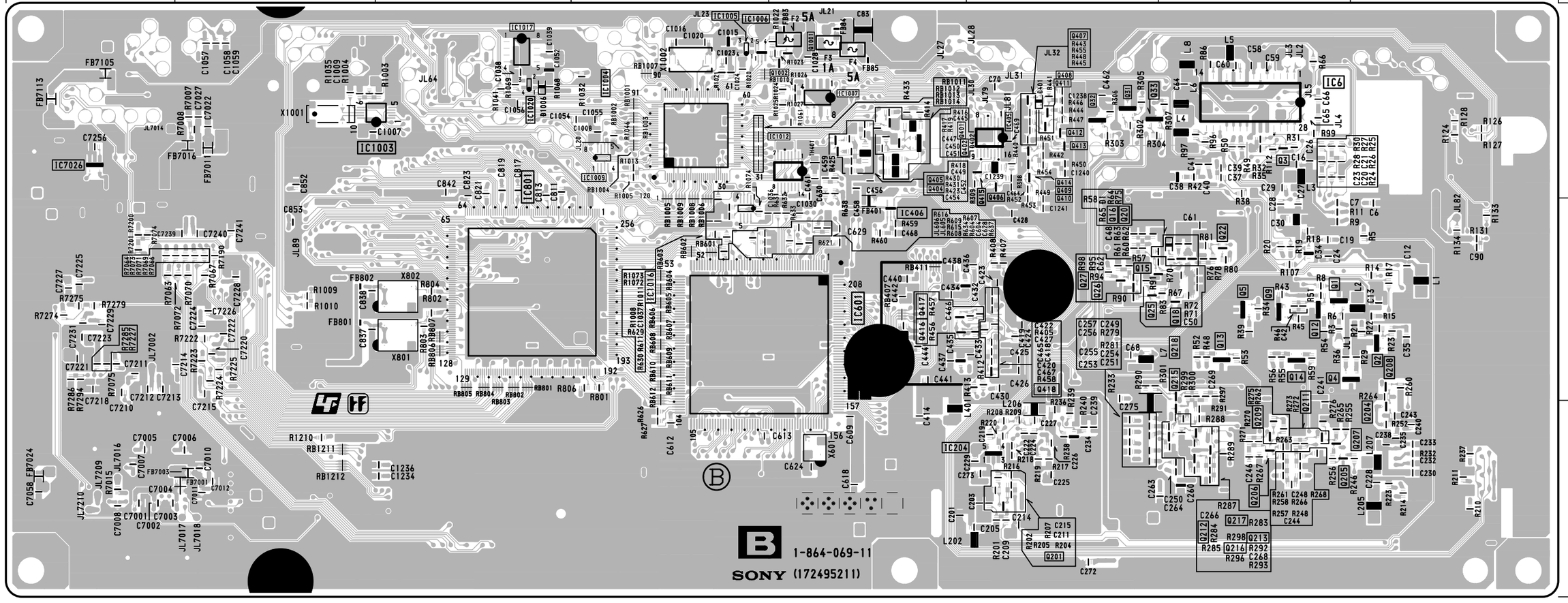
B BOARD (1-864-069-11)
---

*:B SIDE

D1	*C-1	IC206	C-3	IC1011	E-2	Q12	*B-2	Q204	*A-3	Q410	*C-1	TP401	C-2
D401	*C-2	IC207	B-2	IC1012	*D-1	Q13	*B-2	Q205	*B-3	Q411	*C-1	TP402	C-3
D402	*C-2	IC208	B-3	IC1016	*E-2	Q14	*B-2	Q206	*B-3	Q412	*C-1	TP403	C-3
D403	D-1	IC209	B-3	IC1017	*F-1	Q15	*C-2	Q207	*B-3	Q413	*C-1	TP608	E-2
D1002	F-1	IC401	C-1	IC1019	D-1	Q16	*C-2	Q208	*A-2	Q414	*C-1	TP609	E-2
D1003	G-1	IC402	D-1	IC1020	*F-1	Q17	B-1	Q209	*B-3	Q415	*C-1	TP611	E-2
D1004	E-1	IC403	D-2	IC1205	F-3	Q18	*B-2	Q210	B-2	Q416	*D-2	TP612	E-2
D1005	E-1	IC404	D-1	IC7001	H-3	Q19	B-1	Q211	*B-3	Q417	*D-2	TP613	E-2
D1006	*F-1	IC405	*C-1	IC7002	G-3	Q20	*C-2	Q212	*B-3	Q418	*B-2	TP614	E-2
D1007	F-1	IC406	*D-2	IC7003	G-1	Q21	B-1	Q213	*B-3	Q419	C-1	TP615	E-2
		IC601	*D-2	IC7026	*H-1	Q22	*B-2	Q214	B-2	Q1001	*D-1	TP801	F-2
IC1	A-2	IC603	E-3	IC7101	H-1	Q23	C-2	Q215	*B-2	Q1002	*D-1	TP802	F-2
IC2	B-2	IC604	D-2			Q24	C-2	Q216	*B-3			TP803	F-2
IC3	B-1	IC801	*F-1	Q1	*B-2	Q25	*C-2	Q217	*B-3	TP1	A-2	TP804	G-2
IC4	B-1	IC802	F-2	Q2	*A-2	Q26	*C-2	Q218	*B-2	TP2	A-2	TP805	G-3
IC5	B-2	IC803	F-2	Q3	*B-1	Q27	*C-2	Q401	*D-1	TP3	B-2		
IC6	*B-1	IC804	G-1	Q4	*B-2	Q28	C-2	Q402	*D-1	TP4	B-2		
IC7	C-1	IC1003	*G-1	Q5	*B-2	Q29	C-2	Q403	D-1	TP5	B-2		
IC8	A-1	IC1004	*E-1	Q6	B-2	Q30	C-2	Q404	*D-1	TP6	B-2		
IC9	A-2	IC1005	*E-1	Q7	B-1	Q31	*C-1	Q405	*D-1	TP7	B-2		
IC201	C-3	IC1006	*E-1	Q8	B-1	Q32	*C-1	Q406	*C-1	TP8	B-2		
IC202	D-3	IC1007	*D-1	Q9	*B-2	Q33	*C-1	Q407	*C-1	TP9	B-2		
IC204	*D-3	IC1009	*F-1	Q10	B-1	Q201	*C-3	Q408	*C-1	TP201	A-3		
IC205	A-3	IC1010	E-2	Q11	B-1	Q203	A-3	Q409	*C-1	TP202	B-3		

H G F E D C B A

1 2 3



B -B SIDE-
SUFFIX: -11

Q BOARD (1-864-066-11)
---

*:B SIDE

D3005	C-4	Q3017	D-3
D3006	A-4	Q3019	D-3
D3007	C-4	Q3021	D-3
D3008	A-4	Q3024	D-4
D3009	C-4	Q3025	D-4
D3010	B-4	Q3029	D-4
D3011	B-4	Q3030	D-4
D3012	A-4	Q3032	D-4
D3013	A-4		
D3014	A-4		
D3015	C-4		
D3016	B-4		
D3017	C-4		
D3018	A-4		
D3019	C-3		
D3020	C-3		
D3021	C-3		
D3022	C-3		
D3023	C-3		
D3024	C-3		
D3025	C-3		
D3026	C-3		
D3027	A-1		
D3028	A-2		
D3029	C-3		
D3035	B-4		
D3036	B-4		
D3037	C-4		
D3038	C-4		
D3042	D-3		
D3043	D-3		
D3044	D-3		
D3048	D-4		
D3049	D-4		
D3050	D-4		
D3051	D-4		
D3052	E-4		
D3053	D-4		
D3054	D-4		
D3055	E-4		
D3056	E-4		
D3057	E-4		
D3060	D-4		
D3061	D-4		
D3062	C-4		
D3063	C-1		
D3064	C-1		
D3065	C-1		
D3066	D-1		
D3067	D-3		
D3068	A-4		
D3069	A-4		
D3070	C-4		
D3071	C-4		

IC3001	B-4
IC3002	C-4
IC3003	C-3
IC3004	A-3
IC3005	C-3
IC3006	B-3
IC3007	B-2
IC3008	B-1
IC3009	H-2
IC3010	G-2
IC3011	D-3
IC3012	C-1
IC3014	D-1
IC3015	E-1
IC3016	B-2
IC3017	D-4
IC3018	F-2
IC3019	F-2
IC3020	F-2
IC3022	C-3
IC3023	B-1
IC3024	H-2
IC3025	H-2
IC3026	H-2
IC3027	H-1

Q3001	B-3
Q3002	A-3
Q3003	A-2
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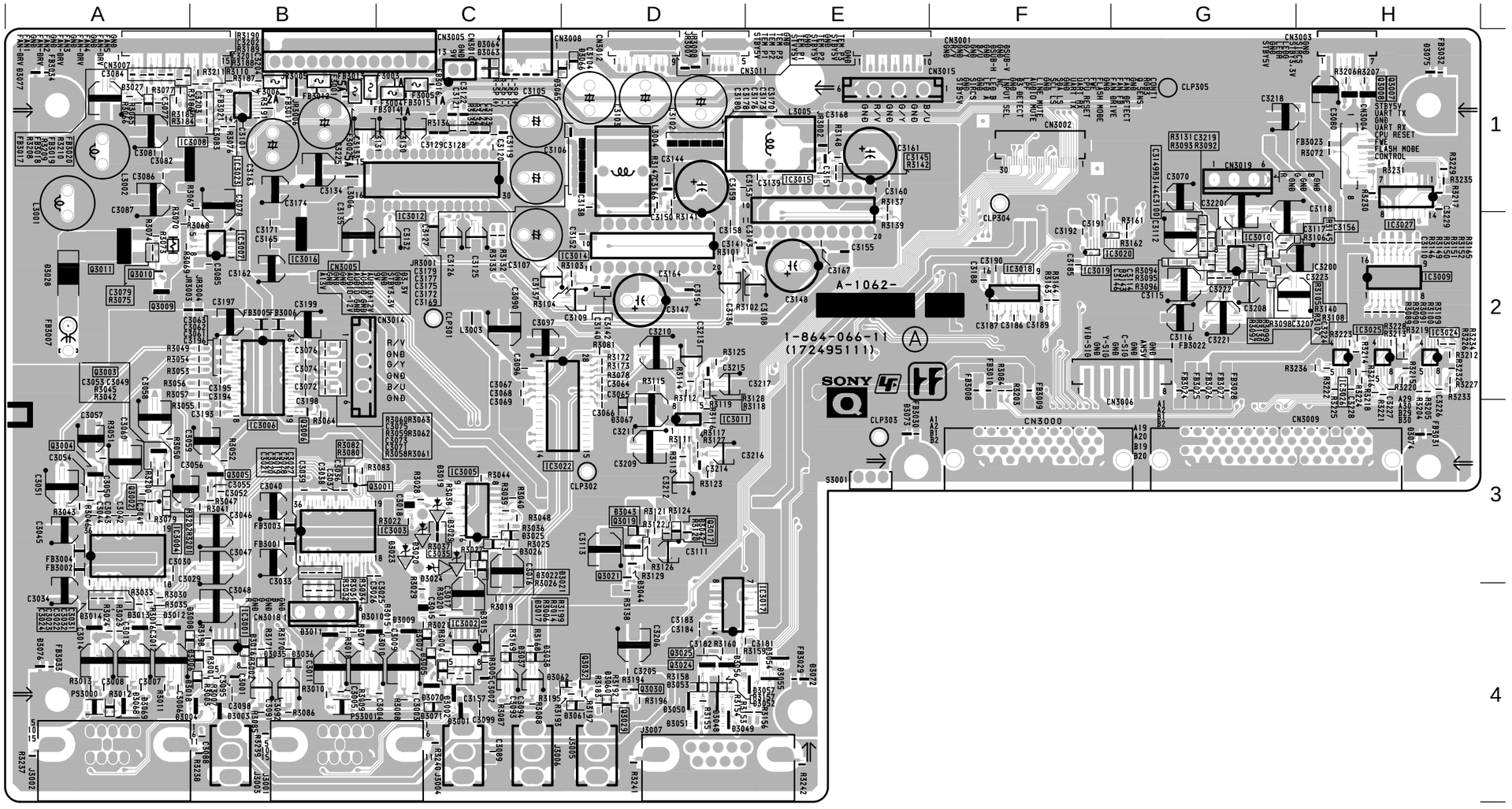
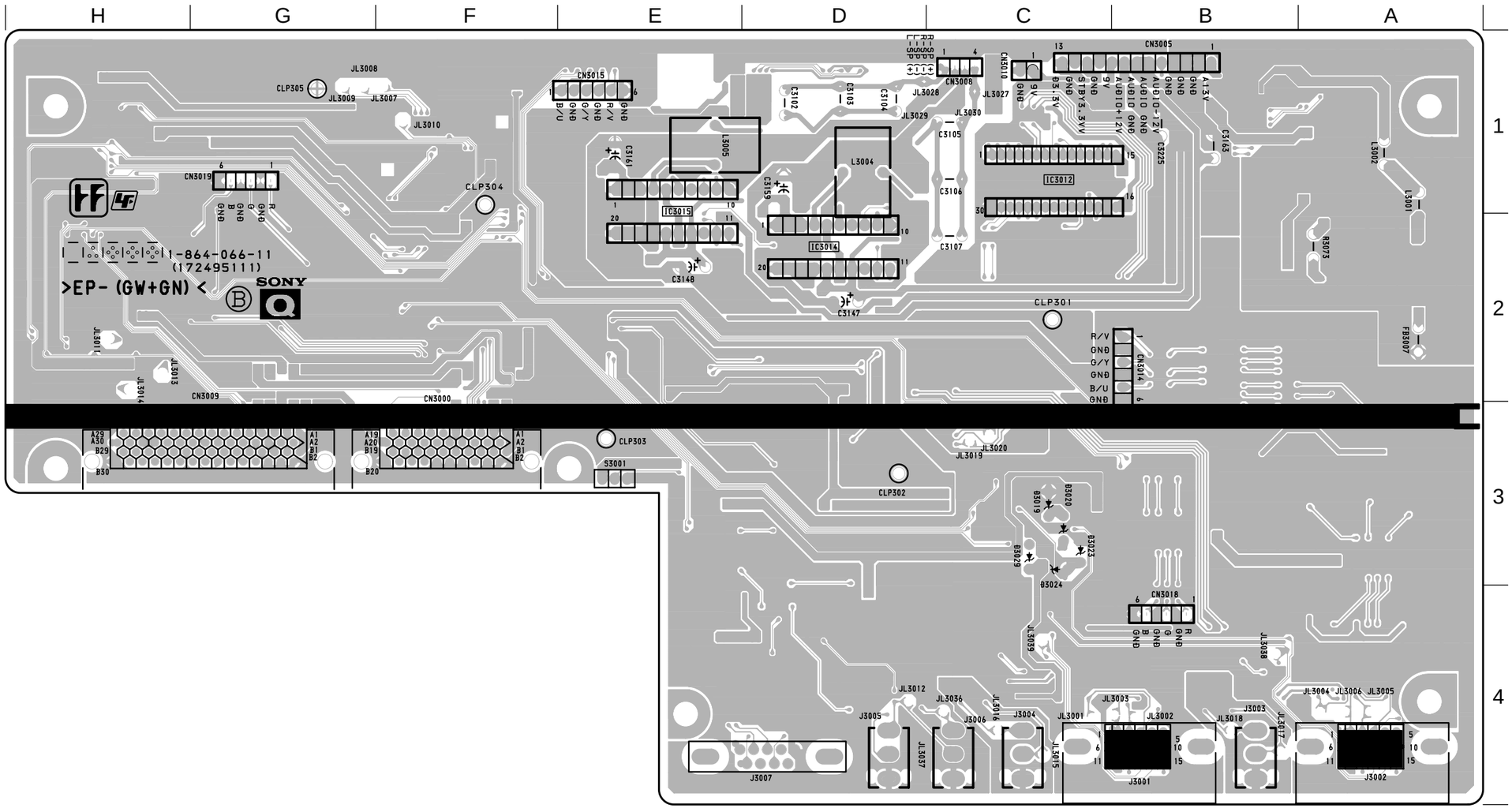
Q3010	A-2
Q3011	A-2



Q -A SIDE-
SUFFIX: -11



Q -B SIDE-
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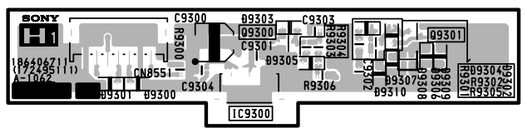

H1 -A SIDE-
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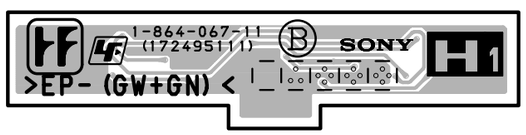
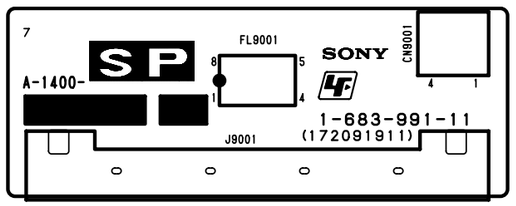
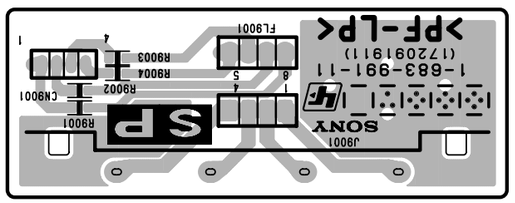


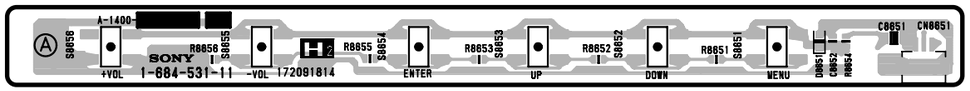
H1 -B SIDE-
SUFFIX: -11



SP -A SIDE-
SUFFIX: -11

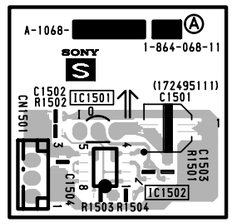


SP -B SIDE-
SUFFIX: -11

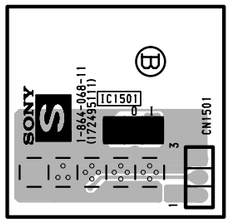


H2 -A SIDE-
SUFFIX: -11

H2 -B SIDE-
SUFFIX: -11

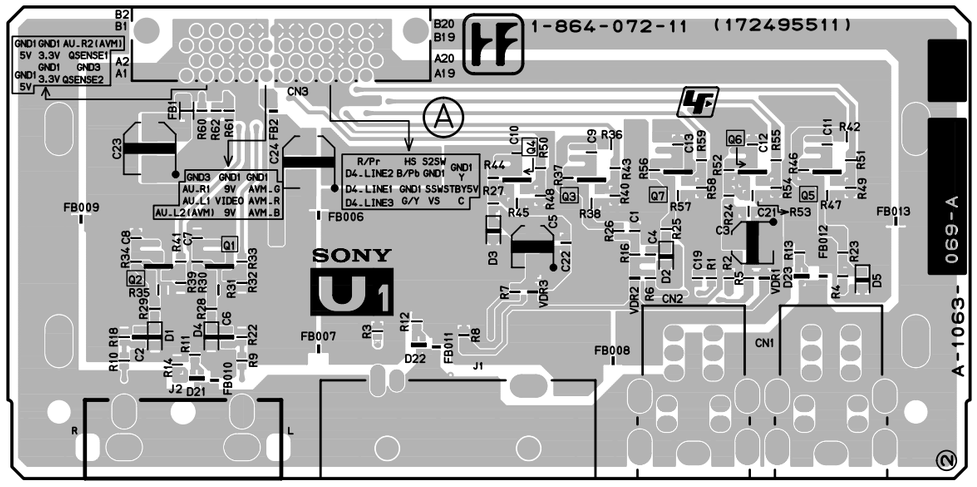


S -A SIDE-
SUFFIX: -11

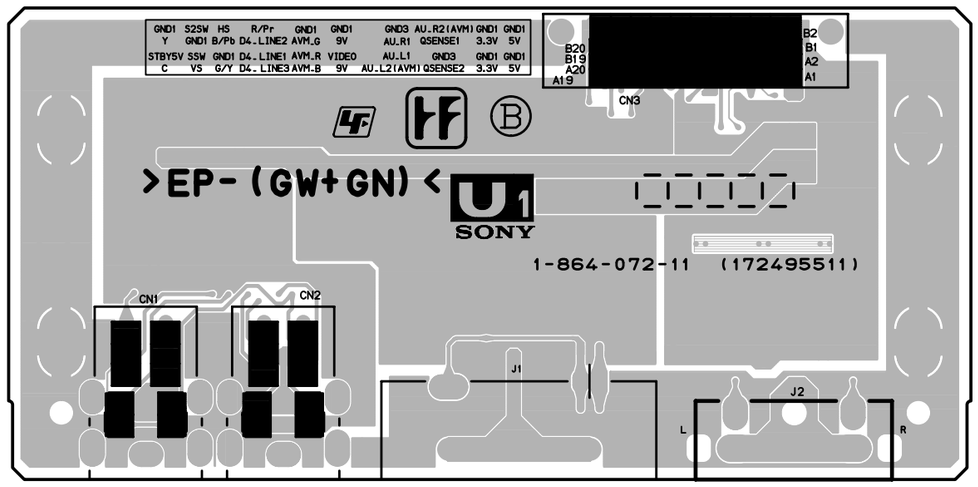


S -B SIDE-
SUFFIX: -11

U1 (FWD-50PX1)



U1 -A SIDE-
SUFFIX: -11
FWD-50PX1



U1 -B SIDE-
SUFFIX: -11
FWD-50PX1

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer :

Check the metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA. Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

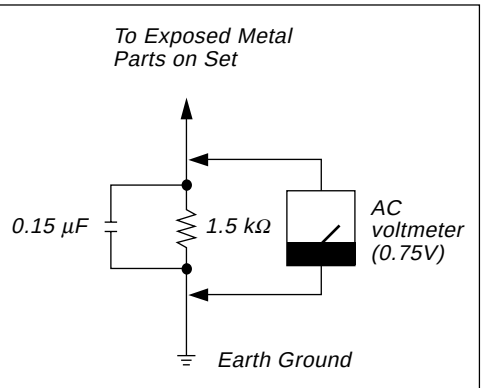


Fig A. Using an AC voltmeter to check AC leakage.

FWD-50PX1 (SY)
FWD-50PX1N (SY) E
9-968-064-01

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B&P Company

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